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The Emergence of Cross-Border Regions

Interim Report

November 2005

PRI Project
North American Linkages

Canada

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About this report

The PRI contributes to the Government of Canada's medium-term policy planning by conducting cross-cutting research projects, and by harnessing knowledge and expertise from within the federal government and from universities and research organizations. However, conclusions and proposals contained in PRI reports do not necessarily represent the views of the Government of Canada or participating departments and agencies.

The Interim Report reflects the efforts of a number of individuals and is based on working papers and contributions by Jean-François Abgrall, Christian Boucher, André Downs, Pierre-Paul Proulx, Gary Sawchuk, and Bryan Smith. The final preparation of the Report was led by Gary Sawchuk.

The Report also benefited from written and oral comments by Emmanuel Brunet-Jailly (University of Victoria), Susan Clarke (University of Colorado), and Debora VanNijnatten (Wilfrid Laurier University).

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INTRODUCTION

The Canada-US Free Trade Agreement (FTA) and the North American Free Trade Agreement (NAFTA) opened a new era in Canada-US relations, not only in the area of economic relations but, more generally, in the ways the two countries interact. The economic consequences have been extensive, and largely positive, but another manifestation of this new relationship has been the growing extent of links of various kinds between the two countries – especially between adjacent and nearby areas along the border.

Consequently, North American integration must analyze different dimensions, involving economic, sociocultural and organizational linkages at the regional level. To date, research efforts have focused on the national perspective, but it is increasingly apparent that the strongest and most varied international linkages are those between neighbouring provinces and states on both sides of the Canada-US border.

The objective of this research project is to substantiate the growing significance, scope, and nature of these cross-border regional relationships. Their existence has numerous policy implications for the Government of Canada in terms of foreign policy, economic and industrial policies, organizational arrangements, regional development, and other matters.

Part 1: Cross-Border Regions as Objects of Analysis

What Is a Cross-Border Region?

The growing significance of cross-border regional relationships leads to the question of distinct cross-border regions and how to identify them. Are there provinces and states[1] whose intra-regional links and commonalities set them apart?

Three Key Dimensions

In reality, the notion of a cross-border region remains somewhat fuzzy since different configurations of provinces and states could be construed as a cross-border region depending on the interest and dimensions considered.

> The approach adopted here relies on the simultaneous examination of three different dimensions. To warrant being called a cross-border region, a region should exhibit sufficient linkages at the *economic*, *socio-cultural*, and *organizational* levels.[2]

Other Background Factors

Geography, history, and demography play an instrumental role in helping to shape and set the stage for the cross-border regional linkages we see today.

Geographic features such as mountains, plains, and coasts, contribute to a north-south orientation in natural resources and economic activity (Figure 1). For instance, there is lumber exploitation in British Columbia, Washington and Oregon, as well as in Quebec and Vermont; an extensive and integrated cattle industry occurs in the West; and fisheries exist along both coasts.

Historically, the coastal regions were integrated along the north-south axis, and shared similar colonial regimes. In fact, before 1846, when the United States and Great Britain finally ended their long-standing dispute over the boundary between the United States and British Canada by settling on the 49th parallel as a compromise, they continued joint occupation of British Columbia, Washington, and Oregon (see Figure 2). On the other side of the continent, by the

Figure 1
Topographic Map of North America

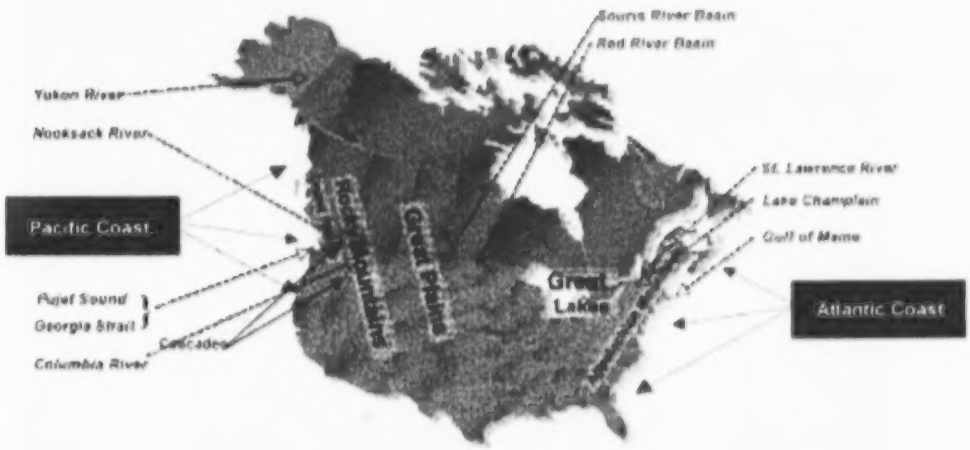

Figure 2
Map of North American Coasts, pre-1776, pre-1846

Note: In 1775, the east coast dependencies of Britain included Newfoundland, St. Johns Island (PEI), Nova Scotia (which includes present-day New Brunswick), and the US coastal colonies down to and including Georgia.

Before 1846, the Oregon Territory was jointly occupied by Britain and the United States. The territory included the present-day lower half of British Columbia, Washington, Oregon, Idaho, and a small piece of western Montana (that falls under present-day British Columbia).

1763 Treaty of Paris, what now includes the province of Quebec, Atlantic Canada as well as all the US coastal states down to and including Georgia shared a British colonial experience. Even after 1776, these regions benefited from similar waves of immigration (e.g., Scottish, Irish, Italian, eastern European), which supported the creation of cross-border networks of social relations.

Finally, as Paul Krugman (1991) pointed out, "Canada is essentially closer to the United States than it is to itself." Demographically speaking, individual Canadian regions are often closer to their northern state neighbours than to other Canadian regions (Figure 3).

Theoretical Foundations to the Study of Cross-Border Regions

The concept of a cross-border region resonates with several theoretical approaches. For example, the literature on economic development based on the analysis of industry clusters (e.g., Porter, 2003), recognizes that these clusters can often straddle international borders. Within these cross-border clusters and surrounding areas, the increasing specialization of firms and prevalence of integrated companies necessitate production processes that transcend the border, with firms actively engaged in the back and forth international movement of parts and components.

Ohmae's borderless world (1990) and rise of regional economies (1995) further highlight the rising importance of regional economies, cross-border or otherwise, in the future global economy. This is a fact picked up by Courchene (1998, 2001) with respect to Ontario within North America and the global economy.

In keeping with economic theories of endogenous growth, the economic success of these clusters and cross-border regions, like any other region, will be based on close interrelationships that include the economic dynamic, but also socio-cultural values and organizations.

Research on the new institutional economics makes comparable links (Williamson, 2000), as does the literature on agglomeration economics, with its emphasis on the importance of proximity, socio-cultural similarities, social capital, and human interaction.

Regarding the literature on economic co-operation (e.g., Leamer and Storper, 2001), insofar as cross-border regions increase personal and professional contacts, they promote trust across the border, which is a key variable in economic co-operation.

Cross-border regions and cross-border organizations also have relevance to the literatures on transaction

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Figure 3
Provincial and State Proximity to Canadian Regions

British Columbia - Alberta		Manitoba-Saskatchewan		Ontario		Quebec		Atlantic Canada	
Provinces or States	Distance	Provinces or States	Distance	Provinces or States	Distance	Provinces or States	Distance	Provinces or States	Distance
Washington	397	North Dakota	505	Michigan	359	Vermont	158	Maine	667
Oregon	680	South Dakota	755	Pennsylvania	477	Maine	326	New Hampshire	834
Montana	911	Montana	860	Ohio	484	New Hampshire	439	Massachusetts	867
Idaho	974	Minnesota	822	Vermont	502	Massachusetts	403	Rhode Island	894
Saskatchewan	1,079	Wyoming	1,136	Quebec	522	Connecticut	439	Quebec	896

Distance is in kilometres. The distance between a province and state is defined as the great circle distance (i.e. the distance between the economic centres using the weighted average of the latitudes and longitudes of their three most populous cities).

To calculate the distance between the grouped provinces — British Columbia-Alberta, Manitoba-Saskatchewan, and Atlantic Canada — and other provinces and states, a weighted average was taken of the group's provincial distances to the same provinces and states, based on the group's provincial population shares (again focusing on the three most populous cities of each province).

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Outline of the Report

In the following, the three main dimensions of the economy, socio-cultural values, and organizations are separately discussed in the context of cross-border regions.

The economic dimension provides the foundation in the sense that it is the quest for economic benefits that usually creates the incentives for cross-border co-operation initiatives. However, the socio-cultural and values dimension, as captured by a convergence of values and the existence of social linkages, also shapes the environment and facilitates cross-border initiatives. The organizational dimension is a "supra-layer" that ensures continuity and provides mechanisms for cross-border co-operation.

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Part 2: Three Dimensions of Cross-Border Regional Relationships

The Economy[3]

> There is a certain richness in the level and diversity of economic links that exist between Canada and the United States. However, *in border areas*, Canada-US economic and commercial activities are definitely stronger and more involved.[4]

The greater degree and intensity of economic relationship along the border is evident from Figure 4, which focuses on recent trade and investment patterns. It shows that Canadian trade flows are greater with neighbouring US states; as well, a considerable portion of US-bound Canadian foreign direct investment (FDI) is located in border states.[5]

But what about cross-border *regional* activity? Specifically, is there a *regional* nature to these cross-border Canada-US economic links?

Economic Evidence on Cross-Border Regional Relationships

Further economic evidence at the provincial-state level confirms the existence of particular groupings of provinces and states whose links are in many ways fairly distinct, increasingly important, and quite dynamic.

This evidence is encapsulated in Figure 5, which highlights results for a few select indicators:[6]

- the absolute level of provincial trade with individual states;
- recent growth in trade;
- the breadth of provincial exports to individual states; and
- bilateral trade intensity, which measures mutual market dependency.[7]

Generally, not only is the level of trade much greater between individual provinces and neighbouring and nearby states, but so, too, their recent growth in trade volumes.[8] Also, provinces export a wider variety of goods to neighbouring states, in keeping with the notion that the more integrated a cross-border regional economy, the broader the range of goods exchanged. Higher bilateral trade intensities further underline how much more the economies of neighbouring provinces and states depend on each other.

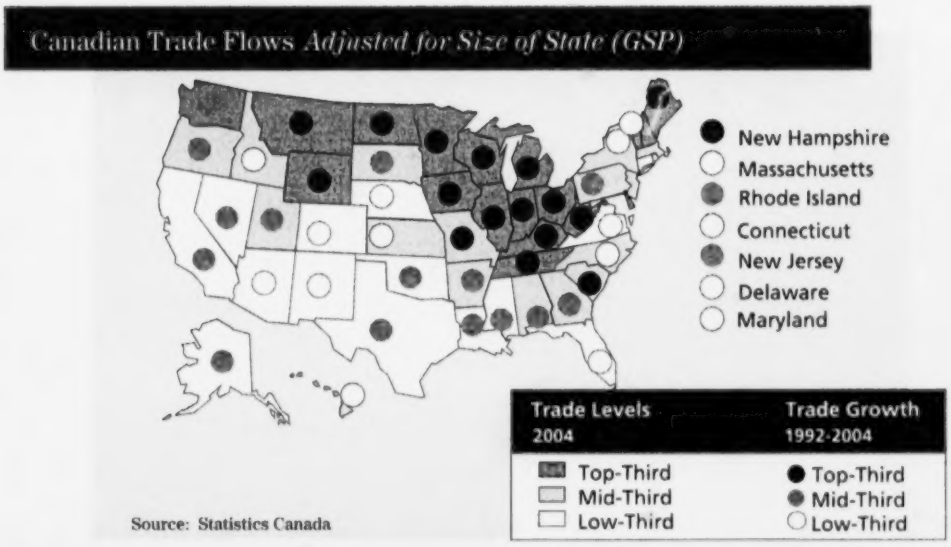
Based solely on these economic results, a few cross-border groupings of provinces and neighbouring and nearby states can be identified.

- In the West: British Columbia, Alberta, and Yukon Territory with Alaska, Washington, Idaho, Oregon, and Montana.
- In the Prairies-Great Plains: Alberta, Saskatchewan, and Manitoba with Montana, Wyoming, North Dakota, South Dakota, and Minnesota.
- In the Great Lakes-Heartland: Ontario with Michigan, Indiana, and Ohio.
- In the East: Quebec with Vermont, Maine, New Hampshire, and New York; and Atlantic Canada with Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut.

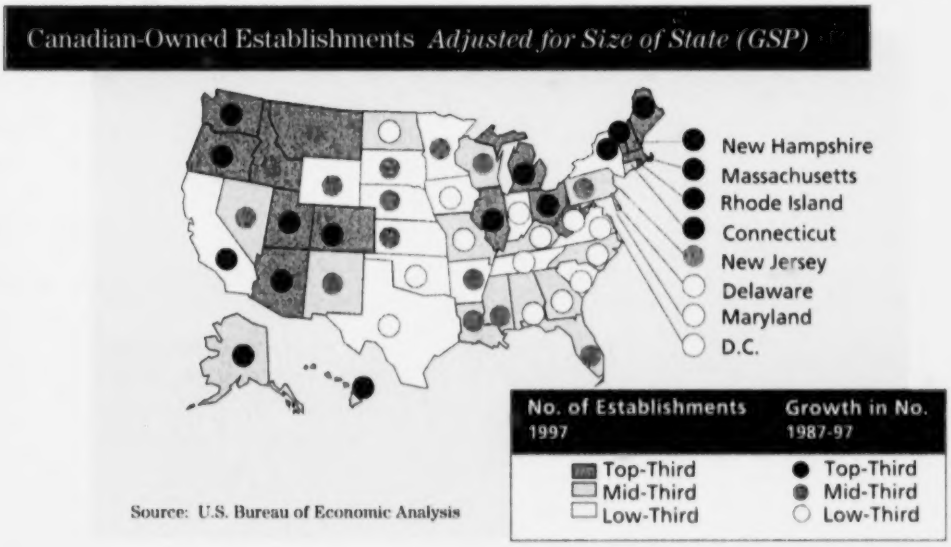
A more encompassing East region could include Quebec plus Atlantic Canada with the six New England states and New York. This underscores the fuzzy nature of cross-border regions. It is possible to distinguish smaller and larger groupings of particular provinces and states. In the case of Quebec and Atlantic Canada, there is considerable overlap in the major trading partners that are cross-border.

On the other hand, Ontario's cross-border trade links are quite different from those for Quebec. Ontario's focus lies with states around Lake Ontario and further south (Missouri and Kentucky, due to heavy trade involving automotive parts). Quebec's trade

Figure 4
Canadian Trade Flows and Direct Investment in the United States



Source: Statistics Canada



Source: U.S. Bureau of Economic Analysis

relations are stronger with contiguous states to its immediate south and east, plus states in which it trades heavily in aerospace parts and high technology (Utah and West Virginia).

The latter point underlines another important fact. While neighbouring and nearby states figure prominently in provincial-state economic relationships, not all of a province's links involve neighbouring or nearby states. In the case of Quebec, its aerospace parts and high-technology industries have resulted in forged ties with states further away. Ontario has also developed relatively strong ties with such states as Kentucky and Missouri, but as they are contiguous to the Great Lake state of Indiana, and involve auto parts trade, these states could also be considered part of the automotive-dominated Great Lakes-Heartland cross-border region with Ontario.

Figure 5
Economic Dimension of Province-State Relations – Select Indicators

State ranking is based on the number of indicators in the Top 5 and Top 10 (two Top 10s equal one Top 5). In case of a tie, the number of Top 5 indicators is the first tie breaker, and the value of the Bilateral Trade Intensity is the second tie breaker.

Alberta appears to be best treated as part of two cross-border regions. This puts Alberta in a unique position. Like British Columbia, Alberta has strong trading ties with Washington, and fairly important trading ties with Idaho. On the other hand, along with the other Prairie Provinces, Alberta has commonalities with its Prairie neighbours which is reflected in strong economic links to the Great Plains states of Montana, Wyoming, North Dakota, and Minnesota.

How Economically Distinct Are These Cross-Border Regions?

In terms of basic economic structure and performance, one would expect neighbouring and nearby provinces and states to have much in common.[9] Figure 6 examines the correlation in economic activity of pairs of individual provinces and states to gauge how strongly related they are in their economic activity.[10]

Provinces tend to be more related in their economic activity with the other provinces and states within its cross-border region than with those outside the region. Moreover, this similarity in economic movement among the intra-regional partners has been on the whole getting tighter.

The correlations within cross-border regions have been generally narrowing since the introduction of the FTA. This is especially evident in the Prairies and the West.[11] This reflects the activities of many provinces becoming more correlated with that of their cross-border region partners. An exception is Ontario whose economic activity was more similar with neighbouring states before the FTA; but is now becoming more synchronized with some states and provinces further away.[12]

As a cross-border region becomes more integrated, one might be expected to see a greater number of production processes cutting across the border, involving more integrated companies, cross-border supply and value chains, and specialized intra-regional trade in parts and intermediate products. This is consistent with higher levels of intra-industry trade within manufacturing.

Figure 7 shows that intra-industry trade is higher on average between individual provinces and states that are partners in a cross-border region.[13] This may reflect a rise in trade in intermediate products related to the increasing importance of integrated companies and cross-border production processes and relations. As links in economic activity develop further with respect to supply and value chains, cross-border trade dependencies should also increase. Intra-industry trade is noticeably less for provinces in Atlantic

Figure 6
Correlations in Economic Activity

Averages	West *		Prairies/Plains			Great Lakes-Hearland	East				
							Quebec		Atlantic Canada		
	BC	AB	AB	SK	MB	ON	QC	NB	NS	PE	NL
1979-1988											
With Cross-border Partners	0.566	0.388	0.378	0.314	0.398	0.894	0.946	0.958	0.953	0.974	0.962
With Others	0.714	0.686	0.688	0.708	0.816	0.793	0.777	0.753	0.749	0.750	0.754
1989-2004											
With Cross-border Partners	0.972	0.954	0.972	0.961	0.947	0.877	0.976	0.976	0.972	0.971	0.953
With Others	0.952	0.952	0.948	0.939	0.932	0.925	0.925	0.920	0.941	0.919	0.881

"Correlations in Economic Activity based on Chen-Curtis (2004) using quarterly data, 1979-2004, for provinces and states (including Washington, DC)."
Source: PRI calculations based on data from Federal Reserve Bank of Philadelphia and Industry Canada.

Figure 7
Province-State Intra-industry Trade

Averages

	BC	AB	AB	SK	MB	ON	QC	NB	NS	PE	NL
2004											
With Cross-border Partners	41.2	29.1	26.9	22.8	27.1	59.9	32.9	25.0	3.1	12.1	4.0
With Others	34.4	29.9	29.9	17.9	23.0	41.8	28.0	14.4	4.4	13.3	6.7

"Intra-industry trade involves only binational trade flows between individual pairs of provinces and states (including Washington, DC)."
Source: PRI calculations based on data from Statistics Canada.

Canada, but relatively high between Ontario and the states in its Great Lakes-Heartland region, and between Quebec and its cross-border state partners.

Regional economic hubs with cross-border influences, and the development of industrial clusters that straddle the border also indicate distinct cross-border regions.

- In the West, strong economic ties run between Vancouver and Seattle.
- In the western part of the Prairies-Great Plains area, Edmonton and Calgary are important hubs for several economic activities. Similarly, Minneapolis is a key economic hub, with strong links that extend to Winnipeg and several other prairie cities.
- In the Great Lakes-Heartland area, Detroit is still the centre of the auto industry, which dominates trade between communities in southern Ontario and US states; and both Toronto and Detroit cast important influences for communities along the 401/402 corridor.
- Montréal's economic influence transcends into northern New England, and the Massachusetts Bay area's sphere of influence extends up along the coast through to Atlantic Canada.

A number of important activities are held in common by groups of provinces and states along the border. Figure 8 illustrates these key cross-border activities and clusters,[11] defined by Michael Porter as geographic concentrations of interconnected companies

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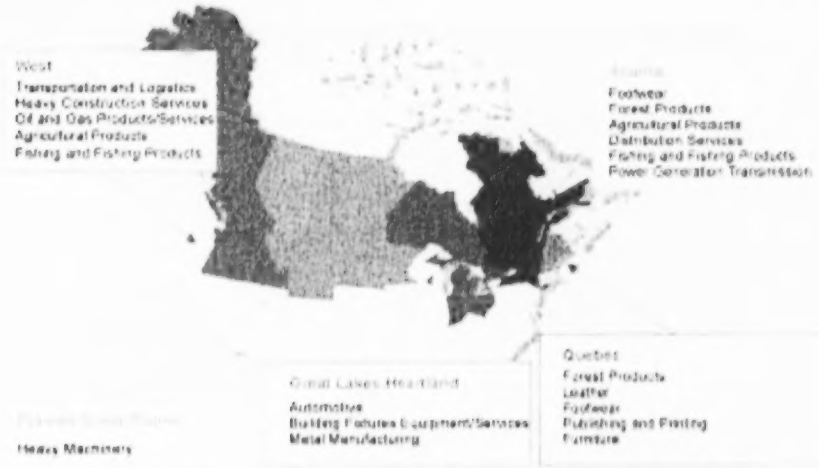
Figure 8
Key Clusters Straddling the Canada-US Border



Note: Location quotients measure how specialized a geographic area is in a particular industry. In our case, 41 industries are examined (industries as defined by Harvard University's Cluster Mapping Project). In particular, a province or state's North American location quotient (NALQ) is defined as the ratio of the province or state's industry share of employment relative to the industry's North American share of employment.

The above key clusters are listed in descending order of importance. To identify key clusters of a cross-border nature (including at least one province and state in a cross-border region), we first rank the individual importance of each industry in each province and state by the NALQ score. We then identify only those industries whose NALQs (rankings of the top provinces and top states in each cross-border region seem to be higher than 10 (e.g., the industry might be within the top 5 out of 41 activities in both the top province and top state).

Source: Harvard University's Institute for Strategy and Competitiveness (Cluster Mapping Project) (Boston, Massachusetts) and the Institute for Competitiveness and Prosperity (Toronto, Ontario).

and organizations in a particular field (Porter, 2003). These would include automotive, forest products, and metal manufacturing (e.g., steel) that are also higher-paying activities.

- The two coasts both have relatively important concentrations of cross-border industrial activity in fishing and fishing products, agricultural products, and energy (oil and gas products/services on the West Coast, and power generation/transmission on the East Coast).
- Automotive, building fixtures equipment/services, and metal manufacturing are vital industries to Ontario and other Great Lakes economies.
- Similarly, forest products, publishing and printing, and furniture are among important industries held in common between Quebec and its cross-border neighbours.

There are other important clusters of activity, for instance oil and gas products and services in both Saskatchewan and Newfoundland and Labrador, apparel and footwear in Quebec, and forest products in New Brunswick.[15] However, there were no cross-border partners engaged in these activities to the same relative degree.

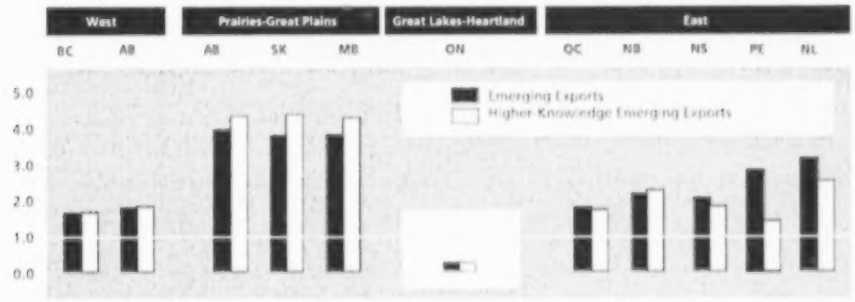
The existence of cross-border clusters is important in terms of policy implications, because the governments of both Canada and the United States may have to join their efforts and co-ordinate their policies to ensure that North American cross-border clusters are competitive in world markets. The automotive industry, steel, agriculture equipment among others, are examples of such cross-border clusters that would benefit from having cohesive policies to maintain their competitiveness in world markets.

Dynamic Nature of Cross-Border Links

While cross-border regions grow in economic importance, it is noteworthy that their economic links have a dynamic nature that continues to evolve. Appendix 1 provides evidence as to the strong and

Figure 9
How Much More Diverse Are Provincial Exports to Cross-Border States?

Ratio of Provincial Export Diversity: Diversity in Exports to Cross-Border States *Relative to* Diversity in Exports to Other US States, 2003



Level of Export Diversity: Index, Ontario = 1.00

	BC	AB	AB	SK	MB	ON	QC	NB	NS	PE	NL
Cross border States	7.58	8.45	15.69	10.19	11.64	1.00	7.32	5.49	5.21	4.83	2.48
	8.21	9.86	18.98	12.38	12.71	1.00	7.11	5.21	4.93	4.98	2.90
Other US States	0.95	0.98	0.80	0.55	0.62	1.00	0.85	[illegible]	0.23	0.48	0.16
	1.05	1.14	0.91	0.59	0.62	1.00	0.88	0.48	0.29	0.58	0.24

Diversity is measured by the number of NAIC four digit codes in which provinces export also taking into account the size (GSP) of the destination state.
Emerging exports are those that tripled in value between 1992-1994 and 2001-2003.
High knowledge exports involve top third of NAIC four digit codes ranked by the proportion of workers with post secondary education.

Note: Ontario is generally more diverse in its US bound exports, but more specialized in its exports to its cross border states relative to other states.

Source: PRI calculations based on data from Statistics Canada (based on provincial and state data including Washington, DC but excluding Alaska)

sustained growth in exports in the aftermath of the FTA and NAFTA. This includes the growth in cross-border regional exports in all provinces generally.[10]

It is interesting to examine whether cross-border regions quicken the introduction of Canadian products in US markets, especially those products involving higher knowledge activities. Figure 9 focuses on emerging provincial exports, which are defined as products that tripled in value between the 1992-1994 and 2001-2003 periods. It is clear that a greater number of such provincial exports are destined to cross-border states than to other states. Also, a high proportion of these happen to be from the higher-knowledge industries,[11] that are likely to have greater positive spin-offs for the provincial economies. Consequently, cross-border regions play an important role in the success of provinces in expanding exports in new high-knowledge areas. This was especially the case for the Prairies, which is expanding the range of products it now exports.

It is noteworthy that Ontario's exports to its cross-border states are relatively concentrated in such key industries as auto parts, chemicals, and industrial equipment. On the other hand, Ontario has always exported in a relatively more extensive range of industries to a wider number of US states than many of its provincial counterparts; Ontario targets the whole US marketplace. Its past success in this regard also contributes to the low ratio of emerging exports in cross-border states compared to other states in Figure 9.

It is interesting to also note the link between high-knowledge activities and the clusters shown earlier in Figure 8. A significant percentage of the higher-knowledge industries are concentrated in cluster activities.

To conclude, there is economic evidence that supports the existence of cross-border regions within which the absolute value of trade is quickly growing, involving a wider variety of exports, many reflecting

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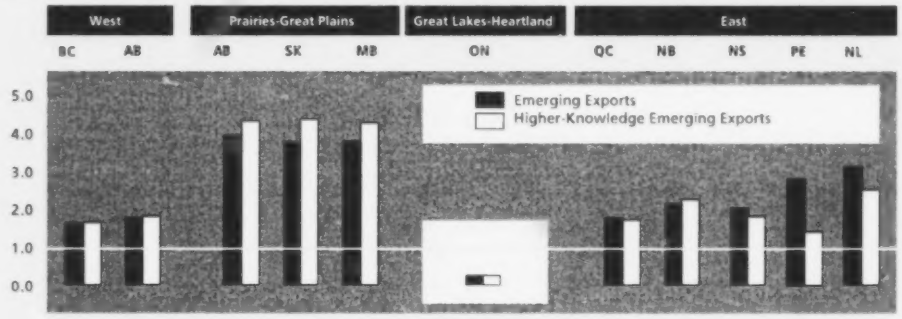

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	BC	AB	AB	SK	MB	ON	QC	NB	NS	PE	NL
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	8.21	9.86	18.98	12.38	12.71	1.00	7.14	5.21	1.93	4.98	2.90
Other US States	0.95	0.98	0.80	0.55	0.62	1.00	0.85	0.52	0.23	0.48	0.16
	1.05	1.14	0.91	0.59	0.62	1.00	0.88	0.48	0.29	0.58	0.24

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High-knowledge exports involve top third of NAIC-four-digit codes ranked by the proportion of workers with post-secondary education.

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higher-knowledge activities. For provincial exports of these higher-knowledge activities, there is relatively higher market dependency on cross-border states versus other states.

So even though globalization is extending the distance through which provinces and states trade (throughout North America and the world), cross-border regions will in all likelihood continue to play a crucial role in the future growth and economic prosperity of Canadian and provincial communities.

Culture and Values

Another key but more contentious and elusive dimension concerning the emergence of cross-border regions relates to culture and values, which we define to also include socio-cultural issues of identity and ideology. Current thought credits culture and values with key functions in organization building and economic decision making (Williamson, 2000; North, 1990). It is generally accepted that these regions are built on the decisions of politicians, business people, and community leaders that, in turn, involve values, ideologies, or identities, facts about the environment, and inferences drawn from these values and facts.

Importance of Shared Values ... and Identity

Understandably, one would expect cross-border regions to emerge more readily in a context where, in addition to some economic rationale, people share similar values and beliefs, and elements of a common ideology. This brings us to the issue of how people see or relate to formal boundaries between themselves and their cross-border neighbours. Here, one can find numerous examples whereby people connect more strongly to groupings that transcend the border and link parts of Canada and the United States.

First, it can be noted that public discourse and opinion surveys are replete with illustrations that highlight positive links between a Canadian and US region or the United States as a whole. For instance, Earle (1998) stated "there has been a curious resonance between Newfoundland and the United States." Similarly, Gibbins (2002) observed "a greater ideological congruence between the (Canadian) West and political trends in the United States." Or this parallel comment by Balthazar (2004) about Quebec: "The United States has always influenced Quebecers' imagination and the socio-political evolution of the French province." Public opinion polls continually show that some Canadian regions have systematically more positive attitudes toward the United States or a particular US region: residents from Alberta are consistently more likely to support social conservative policies and further trade integration with the United States (EKOS, 2004), and residents from Quebec have more similar socio-cultural values with California than any other US regions (Boucher, 2004a).

Second, politicians themselves often make references to common groupings of Canadian and US regions. In February of 2005, in a speech to the 105th American Assembly that discussed Canada-US Relations, Premier Jean Charest of the Province of Québec highlighted that ... "We should certainly build on the vitality of our continent's natural regions ... North American economic relations are based on regional economies that cross ... our border" (Charest, 2005). In July 2000, opening the 25th Annual Conference of New England Governors and Eastern Canadian Premiers (NEG-ECP), in Halifax, John Hamm (2000) as host and Premier of Nova Scotia stated: "We in Nova Scotia, hold our friendship and kinship with our Eastern Canadian and New England neighbours dearly. It is a proud part of our heritage and our history." On the West Coast, Cascadia has become a rallying name for many. Even *The Globe and Mail* concurred with an article entitled: "Cascadia: Where Canadians Live Better Than We Knew" (Sullivan, 2004). Thus, it may not be surprising that an association of provinces and states in the area writes of itself: "If it were a *nation*..." (PNWER, 2004).

In other areas along the border, there may not be the same sense of a common identity or sense of belonging, but still a strong sense of common interest and shared viewpoint. For instance, as the Premier of Ontario, Mike Harris told American governors: "We really see you as very strong allies more so than many parts of Canada, something far more significant than perhaps my national government understands" (Rifkin, 2005). Similarly, in 1990, the Governor of Illinois, James Thompson, stated how "Illinois and the Midwest have, in many aspects, much more in common with provinces in central Canada than with American neighbours on the coasts of California and New York."

Figure 10
Top Three Most Similar Cross-Border Regions—Socio-Cultural Values

Notes
- Northwest includes Washington and Oregon
- California includes California
- Rocky Mountain includes Idaho, Montana, Wyoming, Nevada, Utah, Arizona, and New Mexico
- West South Central includes Texas, Oklahoma, Arkansas, and Louisiana
- East South Central includes Mississippi, Alabama, Tennessee, Kentucky, West Virginia, and southern Ohio
- East North Central includes Wisconsin, Michigan, Illinois, Indiana, and northern Ohio
- West North Central includes North Dakota, South Dakota, Minnesota, Nebraska, Iowa, Kansas, and Missouri
- South Atlantic includes Florida, Georgia, South Carolina, North Carolina, Virginia, Maryland, and Delaware
- Mid-Atlantic includes Pennsylvania, New York, and New Jersey
- New England includes Maine, New Hampshire, Vermont, Massachusetts, Connecticut, and Rhode Island

Is There Cross-Border Socio-Cultural Similarity?

Surveys, such as the World Value Survey, provide a basis for comparing Canadian and US regions. Research to date supports the hypothesis that there are similarities in values and beliefs among some contiguous provinces and states (e.g., British Columbia and Washington, Ontario and Michigan).

To examine the extent of the similarities between Canadian and US regions, the PRI developed a socio-cultural index based on 32 values collected for the years 1990 and 2000 and used this index to assess the level of dissimilarities and similarities among certain cross-border regions (see Appendix 2 and Boucher, 2005). The extent of the similarities between Canadian and US regions is measured by ranking, for each Canadian and US region, the top three most similar regions.[18] Figure 10 displays the results.

Although the differences between Canadian and US regions are generally relatively small,[19] the PRI analysis suggests that the cross-border linkages in socio-cultural values are strongest in coastal areas. The socio-cultural values of Atlantic Canada are closer to those of the US East. On the other hand,

Alberta and British Columbia have socio-cultural values that are closer to those of the US West. Some results are more complex: Quebec is relatively closer to the US Northwest and California in addition to New England, while the socio-cultural values of Saskatchewan-Manitoba do not appear to be particularly close to any particular US region, with the possible exception of the Northeast.[20]

As a whole, these findings concur with remarks from various other sources. For instance, Garreau (1981) described how many contiguous provinces and states are part of unique bi-national regions. Nevitte (1996) also found that "British Columbians and residents of the Pacific Northwest may have more in common with each other than with other regions even in their own countries," and the Government of Alberta (Alberta, 2004)[21] noted: "Studies have indicated that attitudes and values of Albertans and residents of the Pacific Northwest have more in common with each other than with other regions of their own countries." Grabb and Curtis (2004) argued that the historical and sociological processes have promoted significant internal divisions in the two nations – between French and English Canada on one side of the border, and the North versus the South – resulting in four separate "societies."

In fact, the PEW Research Center (2003) claimed how "Americans from the northern states often have more values in common with their Canadian neighbours than they do with their cousins from southern states." It also concluded that the gap between Americans and Canadians is a regional rather than a national one, which more or less echoes Rifkin's (2005) remarks concerning "blue states" and Canadian provinces: namely that the "blue states" that are mostly northern and coastal, resemble some Canadian provinces in several categories of values and beliefs.

Cross-Border Ideological Communities

Somewhat related to and in line with the above findings on socio-cultural values, is the finding that ideological communities are more likely to be cross-border and north-south in nature. A survey of the literature suggests three types of ideological communities.

- In the western part of the continent, one finds more *free-marketeers* – people less inclined to state intervention. Sometimes referred to as a frontier mentality, which is perhaps a result of greater isolation from the seats of central government (and top-of-mind central government concerns), their socio-cultural values become manifest in greater reliance on market outcomes especially on economic issues. However, it also becomes reflected in a co-operative and social movement that is relatively stronger on the Canadian prairies that involves a greater willingness to work together for the wider good, even outside government. On the other hand, there is the "modèle québécois" and greater dependency on government in economic and social areas.[22]
- *Status promoter* refers to those who would like to see their area better recognized within their own countries and the world. They have also been called devolutionists (Clarke, 2000) or nationalists (Lecours, 2002) in the paradiplomacy literature, although "status promoters" implies more social and cultural objectives. In this terminology, Quebec's *independentists* are status promoters, but so too, but less extremely, are a number of people in the eastern and especially western parts of the continent, although the status sought may involve greater active participation and non-pecuniary contributions to national deliberations.
- *Environmentalists* can be found from coast to coast. Yet nowhere has ecology been so much a part of the regional ideology as in the West. Only the *Northwest Environment Watch* publishes a scoreboard to assess well-being in its region.

Other Related Evidence

Other scattered yet multidisciplinary evidence in the realm of culture and values supports the growing emergence of cross-border regions.

- Qualitative case studies conducted along the border suggest that many border cities "feel they have more in common with their neighbours across the border than they do with their national capitals" (Papademetriou and Meyers, 2001).
- Regional and state/provincial patterns in policy use are "evident depending on the particular economic development policy considered" (Reese and Rosenfeld, 2000).

- A study of college students in Windsor and Detroit indicated that there was a highly similar borderland personal value system, and because respondents lived in the same media-cultural environment, there was a strong acculturation process (Surlin and Berlin, 1991).
- A linguistic study revealed that although there is no evidence of English language Americanization along the Canada-US border, there are strong indications of regional language convergence on both sides of the border (Chambers, 2002).

In conclusion, there is certainly evidence of a socio-cultural nature that a special relation exists between neighbouring areas of Canada and the United States. The northeast and northwest coastal regions are especially characterized by shared values, ideological communities, and even identity. The cross-border areas within the Great Lakes-Heartland region share commonalities in socio-cultural values and ideological communities (but not so much a common identity). The Prairies-Great Plains have significant but generally weaker cross-border similarities in terms of socio-cultural values.

Albeit imperfect indicators, all of the measures and comments highlighted above express a positive attitude toward collaboration with the United States and, given the regional nature of the Canadian sources, can be presumed to imply a favourable basis for the emergence of further regional cross-border relationships.

Cross-Border Organizations

The Canada-US FTA and NAFTA have been important in spurring the creation and development of cross-border organizations, by fashioning new rules but keeping common institutions to a minimum.

While helping to fill the void, cross-border organizations often focus on issues of a more regional nature that may not have enough national momentum to attract the necessary resources from central governments. Consequently, they have an important role to play in helping to manage regional aspects of North American integration.

Different Types of Cross-Border Organizations

Numerous types of cross-border organizations exist, with different participant make-ups and objectives. For instance, some involve only two partners, such as a memorandum of understanding (MOU) between a province and a state, while others involve many partners. Some organizations have only private members (e.g., business people, citizens, non-governmental organizations or NGOs) and others have public members (e.g., provinces and states, and less frequently municipalities) or consist of both public and private representatives. As well, some are narrow in focus, while others are multi-purpose in nature. Figure 11 provides a summary of the main topics addressed by some typical cross-border organizations.

The following highlights and examines four main types of cross-border organizations:

- general-purpose intergovernmental;
- single-purpose intergovernmental;
- those with a strong city orientation; and
- those with a strong civil orientation.

General-Purpose Intergovernmental Organizations

Intergovernmental organizations involve associations or agreements between provinces and states, and sometimes other levels of government. Most intergovernmental organizations are fairly recent, post-FTA, and take the form of a province joining a pre-existing US organization. Some cater more to legislators while others concern governors and premiers. Examples include the Council of State Governments (CSG), which was founded in 1933. New Brunswick, Nova Scotia, and Quebec (since 1990) are members of the Eastern Regional Conference (CSG-ERC). Ontario, Manitoba, and Saskatchewan are affiliate members of the CSG-Midwest, and Alberta and British Columbia are associate members of CSG-West. In addition, Quebec (since 1995) and Ontario are international members of the national CSG.

The National Conference of State Legislatures was founded in 1975, to promote communication among state legislatures and to provide them with a strong and cohesive voice in Washington. It deals with a wide array of issues of state interest. The National

Figure 11
Main Areas of Activity of Select Cross-Border Organizations

	Multilateral		Memorandum of Understanding			
	PNWER	NEG-ECP	Quebec-New York	Ontario-New York	Ontario-Michigan	MABAC
Agriculture	•	•				•
Border	•	•	•	•	•	
Energy	•	•				
Environment	•	•	(1)		•	•
Forestry	•	•				•
Fisheries		•				
Culture				•		
Health care	•			•		
Indigenous People				•		
High tech	•	•	•	•		
Infrastructure	•	•	•	•		
Maritime Security	•					
Sustainable Development	•	•		•		
Tourism	•	•	•	•	•	•
Trade/economic Development	•	•	•	•	•	
Transportation	•	•	•		•	•
Work force	•	•		•		
Education			•	•		•
Homeland Security	•	•			•	
Dispute Mechanisms	•	•				•

Notes:
PNWER: Pacific NorthWest Economic Region
NEG-ECP: New England Governors/Eastern Canadian Premiers
MABAC: Montana-Alberta Bilateral Advisory Council

1. Quebec has an MOU with New York and Vermont for the management of Lake Champlain.

Assembly of Quebec has been an associate member since April 2000. There are also regional branches, such as the Midwestern Legislative Conference of which Ontario and Saskatchewan are members.

Governors' associations have been accepting provinces as members. The form of provincial participation varies depending on the association. The Council of Great Lakes Governors was created in 1983. Ontario and Quebec have been associate members since 2001. In the West, the premiers of Alberta, British Columbia, Manitoba, and Saskatchewan and the governors of the Western Governors' Association meet annually. These two governors' associations are concerned mostly with environmental issues, and in the case of the Western Governors' Association, with energy. Although they are important lobby groups, they mostly provide an opportunity for political leaders to meet and discuss important issues. However, they do not have the supporting structure nor the resources and scope of the two provincial and state government organizations that can be found on either coast.

The Conference of New England Governors and Eastern Canadian Premiers (NEG-ECP) has existed since 1973. Its membership includes the premiers of the four Atlantic Provinces and Quebec, and the governors of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Its main objective is economic and more specifically the expansion of economic ties among the participants.

It also deals with issues related to energy, agriculture, transportation, tourism, and the environment. The participants meet once a year, alternating between Canada and the United States. Since 2000, the Conference has included associate participation by the private sector at its annual meetings and has set up a number of committees to work on specific issues, such as energy and biotechnology.

The Pacific NorthWest Economic Region (PNWER) is a public/private partnership involving, on the Canadian side, Alberta, British Columbia, and Yukon and, on the US side, Alaska, Idaho, Montana, Oregon, and Washington. It was created in 1991 to increase the economic well-being and quality of life for all citizens of the region, and to promote greater regional collaboration that includes leveraging regional influence in Ottawa and Washington. It has developed 17 working groups addressing issues related to such sectors as agriculture, energy, environment, and high-tech. It also has a private sector council of business people.

The NEG-ECP and PNWER are more structured and more ambitious than the previously mentioned general-purpose intergovernmental organizations. They are especially interesting because of their association with the private sector that includes, in the case of PNWER, the "civil society." They are the pre-eminent cross-border organizations in their respective geographic areas.

Most provinces have bilateral agreements with neighbouring or non-neighbouring states. These bilateral agreements often take the form of MOUs. For example, Alberta signed the Montana-Alberta Bilateral Advisory Council (MABAC) and has an MOU with Idaho (both states are also members of PNWER). Similarly, Ontario has individual MOUs with New York and Michigan, both fellow members of the Council of Great Lakes Governors. In the Prairies-Plains, there is no strong cross-border intergovernmental organization, but Manitoba has an MOU with Minnesota. The case of Quebec is also different. Quebec is a member of the NEG-ECP and of the Council of Great Lakes Governors; it has separate MOUs with Vermont (another NEG-ECP member) and New York (a Council member).

Single-Purpose Intergovernmental Organizations

Specific-purpose intergovernmental organizations are numerous and cover a vast spectrum of fields. For illustrative purposes, the following focuses on two key cross-border issues: the environment and infrastructure.

Environmental cross-border co-operation takes various forms. Some general-purpose organizations have actually set up committees or working groups to deal with the environment, and there are a host of stand-alone agreements between provinces and states (Abgrall, 2004b) that include structured organizations. Key examples include the Gulf of Maine Council on the Marine Environment, the Great Lakes Commission, the Great Lakes Fishery Commission, the Red River Basin Commission, and the British Columbia/Washington Environmental Cooperation Council. Other noteworthy examples are the St. Croix International Waterway Commission between New Brunswick and Maine, the MOU between Quebec, Vermont, and New York for the protection of Lake Champlain, the International Souris River Board with representatives from Manitoba, Saskatchewan, North Dakota, and both federal governments, and the Okanagan River Basin between British Columbia and the State of Washington (Harris, 2001). Environmental organizations do not necessarily interact much with other organizations in their geographic area. However, their mere existence reinforces the message to other groups that cross-border co-operation is possible.

Growth in bilateral trade and security concerns have stimulated infrastructure co-operation at various crossing points between Canada and the United States. Examples include Calais/St. Stephen between New Brunswick and Maine, the Champlain/Lacolle Port of Excellence between Quebec and New York, and Coutts/Sweet Grass between Alberta and Montana. Yet none is as involved and elaborate as the International Mobility and Trade Corridor (IMTC) between British Columbia and Washington, created in 1997 to improve mobility in the Cascade Gateway (the four border crossings between Western Washington and British Columbia). The IMTC includes

representatives from transportation and inspection agencies (including federal and departmental representatives from both sides of the border), municipalities, NGOs, and private industry.

Both the environment and infrastructure cases illustrate the key driver for cross-border co-operation that is the presence of public goods. In the case of the environment, the border acts as a hurdle to implementing the management of ecosystems, and in the case of infrastructures, it is the management of the physical border itself that is the public good.

Cities and Cross-Border Organizations

Cities and their urban actors, such as economic regional development agencies and chambers of commerce, are affected increasingly by issues that transcend the Canadian-US border (Soldatos, 2003). These issues include public finance, devolution, economic metropolization, and increasing multiculturalism. The number of cross-border organizations involving cities is quite limited.[23]

Around the Great Lakes region, there is the International Association of Great Lakes and St. Lawrence Mayors, and a parallel organization named the Great Lakes Cities Initiative. In the West, there is the Cascadia Mayors Council, a regional coalition of mayors from British Columbia, Washington, and Oregon. There are a few other examples of cross-border co-operation, but they are essentially of a bilateral nature, for instance between Buffalo and Niagara, Toronto and Chicago, Toronto and Indianapolis, Québec City and Albany, and Vancouver and Seattle (on security issues). There is also cross-border co-operation, albeit more informally, between smaller cities like Edmunston, New Brunswick and Madawaska, Maine; Lethbridge, Alberta and Grand Falls, Montana.

Civil Organizations

The members of these cross-border organizations mainly represent economic, business, and environmental organizations,[24] and think-tanks.

Atlantica – the International Northeast Economic Region, is an economic and business organization was launched officially in September 2004. It includes representatives of the Atlantic Provinces and of New England, and has, among its goals, to promote a seamless border and the northeast economic region. It has the support of various organizations in Canada, such as the Atlantic Provinces Chambers of Commerce as well as the strong backing of the Atlantic Institute for Market Studies (Halifax).

Other examples of economic and business organizations include:

- the New England-Canada Business Council, and the Forum transfrontalier Québec-Nouvelle Angleterre, launched in October 2004 to contribute to economic and cultural cross-border integration;
- Quebec-New York Trade Corridors Initiative, whose objective is to develop the potential for a common economic region in such areas as infrastructure, environment, education, research, and industrial development (Juneau, 2004);
- the Council of Great Lakes Industries, whose members include major US and Canadian companies, and is actually challenging governments to provide stronger leadership on common issues in the Great Lakes region[25];
- the Pacific Corridor Enterprise Council, created in 1989 and including business representatives mostly from British Columbia and Washington; and
- the Pacific Northwest Economic Development Council, whose creation dates back to 1959, with membership from businesses, utilities, port authorities, governments from the same states and provinces as PNWER plus Hawaii.

One of the oldest environmental organizations is the Atlantic Salmon Federation. Created in 1948, it promotes the conservation of Atlantic salmon. It has members in all five eastern provinces and in New England and boasts more than 140 affiliates. The Gulf of Maine Council also counts over 600 NGOs working for the Gulf eco-system. Usually, these affiliates are not cross-border organizations, but it testifies to the capacity of the Federation and the Council to harness resources in the domain of the environment.

In the Great Lakes area, the Great Lakes Environmental Directory is worth noting. It is a project of two environmental groups, the Environmental Association

for Great Lakes Education and the Great Lakes Aquatic Habitat Network and Fund.

However, it is in the West that one finds the most militant organizations advocating the protection of the environment. *Northwest Environment Watch* publishes a Cascadia Scorecard and "promotes an environmentally sound economy and way of life in the Pacific Northwest, a bioregion that includes Washington, Idaho, British Columbia, and adjoining parts of Alaska, Montana, and California." But there are many others, such as, for instance, the People for Puget Sound, the Kettle Range Conservation Group, or the various foundations funding environmental projects.

In general, think-tanks are not exclusively devoted to cross-border co-operation, yet for some of them this type of co-operation is an important part of their program. It is the case of the Discovery Institute in Seattle, the instigator of the Cascadia Project, a transportation project covering Washington, British Columbia, and Oregon and of the Cascadia Institute, home of the concept of Cascadia as a bioregion. In the East, the Atlantic Institute for Market Studies is a strong advocate of cross-border co-operation between eastern Canada and New England. The Northern Great Plains Inc. is a non-profit organization doing research on the long-term economic sustainability of an area representing the states of Iowa, Minnesota, Nebraska, North Dakota, and South Dakota, plus Manitoba and Saskatchewan.

Common Characteristics of New Cross-Border Organizations

It is important to note that new cross-border organizations are continually created, mostly through private initiatives.[26] At the same time, established cross-border organizations widen their scope and consolidate their membership. It is difficult to say what ultimate form this phenomenon will take. On the other hand, it is interesting to acknowledge a number of common characteristics that preside at the emergence of these cross-border regional organizations.

- Shared economic interests appear to constitute a necessary, but not a sufficient, condition for the creation of cross-border organizations.
- Cross-border organizations tend to include provinces and states with strong trading relationships.[27]
- The vast majority of activities undertaken by cross-border organizations are in fields under provincial/state or shared jurisdiction.
- Many of these cross-border organizations have representatives of the federal governments; in the vast majority of cases, there is an active collaboration between the cross-border organization and the federal governments.
- In addition, their activities tend to extend and amplify the effects of NAFTA, by encouraging contacts, promoting interactions, and facilitating commercial exchanges. Thus, there is little conflict between the objectives of regional cross-border organizations, the national governments that put in place the FTA and NAFTA, and even the various other levels of government that also have a stake as potential partners in promoting the benefits resulting from greater integration.

PART 3: THE EMERGENCE OF CROSS-BORDER REGIONS

Basic Findings

On the basis of the economic, socio-cultural, and organizational links between provinces and states examined above, what can be said about the extent and nature of cross-border regions in Canada?

It is most apparent from Figure 12 that the significance, scope, and nature of cross-border regional relationships vary considerably as one moves across Canada.

- Overall, the "thickness and intensity" of links appear greatest in the West where the organizational links are most advanced, cross-border economic ties are significant, and socio-cultural values are quite similar.
- In the Prairies-Great Plains, cross-border organizational links are perhaps at their weakest, but the Prairie Provinces' economic links and trade dependencies on cross-border partners are relatively strong compared to those between other Canadian provinces and their cross-border partners.
- Ontario has important links with its neighbouring states in the Great Lakes-Heartland in all three of the economic, socio-cultural, and organizational dimensions. So does Quebec, with respect to economic and organizational links.
- Atlantic Canada has quite active organizational links and fairly significant economic and socio-cultural links with its cross-border partners.

Figure 12
Scope and Nature of Cross-Border Links – Select Indicators

	West		Prairies/Great Plains			Great Lakes Heartland	East: Quebec	East: Atlantic Canada			
	BC	*AB*	*AB*	*SK*	*MB*	*ON*	*QC*	*NB*	*NS*	*PE*	*NL*
The Economy											
Trade level	●	○	●	●	●	●	●	●	●	●	●
Trade growth	◐	○	●	●	●	●	◐	◐	◐	●	●
Trade breadth	◐	◐	●	●	●	○	◐	◐	◐	◐	●
Trade dependency	●	◐	◐	●	◐	◐	◐	●	○	○	○
Culture and Values											
Socio-cultural Values	◐	●	○	◐	◐	◐	○	●	●	●	●
Organizations											
Intergovernmental											
Single-purpose	●	●	◐	○	◐	●	●	●	●	◐	◐
General-purpose	●	●	◐	○	◐	◐	●	●	●	●	●
Civil	●	●	○	○	○	●	◐	○	○	○	○
Cities	●	●	○	○	○	◐	○	○	○	○	○

Strength of Linkage
- ● Relatively Strong
- ◐ Significant
- ○ Weak

Economic measures based on province-state ranks:
- ● Cross-border states comprise Top 3 (and remainder within Top 10), or substantially all cross-border states are within Top 5
- ◐ Majority of cross-border states are in Top 10

Socio-cultural similarity based on socio-cultural value gaps (Boucher, 2005):
- ● Gap of 5 or less percentage points
- ◐ Gap of 5 to 7 or less percentage points

Organizational presence is based on major cross-border organizations between provinces and their cross-border states (Abgrall, 2005)

Cross-border states – West: Alaska, Washington, Idaho, Oregon, and Montana; Prairies-Great Plains: Montana, Wyoming, North Dakota, South Dakota, and Minnesota; Great Lakes-Heartland: Michigan, Indiana, and Ohio; East (Quebec): Vermont, Maine, New Hampshire, and New York; East (Atlantica): Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut.

Part 3: The Emergence of Cross-Border Regions

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	BC	*AB*	*AB*	*SK*	*MB*	*ON*	*QC*	*NB*	*NS*	*PE*	*NL*
The Economy											
Trade level	●	○	●	●	●	●	●	●	●	●	●
Trade growth	○	○	●	●	●	●	○	○	○	●	●
Trade breadth	○	○	●	●	●	○	○	○	○	○	●
Trade dependency	●	○	○	●	○	○	○	●	○	○	○
Culture and Values											
Socio-cultural Values	○	●	○	○	○	○	○	●	●	●	●
Organizations											
Intergovernmental											
Single purpose	●	●	○	○	○	●	●	●	●	○	○
General purpose	●	●	○	○	○	○	●	●	●	●	○
Civil	●	●	○	○	○	●	○	○	○	○	○
Cities	●	●	○	○	○	○	○	○	○	○	○

Strength of Linkage
- ● Relatively Strong
- ○ Significant
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Economic measures based on province-state ranks:
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Although cross-border regional relations can take different forms depending on the province, clearly they are entrenched in the fabric of Canada-US relations at the provincial level. While regional identity or awareness is not always widely apparent or even easily measurable, a *significant* mass of cross-border relations exists in all border areas of Canada.

This reflects positively on the existence and emerging presence of cross-border regions (e.g., provincial-state groupings where a significant mass of cross-border relations exists to warrant their discussion in a regional context).

If critical mass is taken as a defining concept that refers to sufficient linkages in each of the economic, socio-cultural, and organizational dimensions, then perhaps the nomenclature of cross-border region may be most true when used in describing the West, and possibly the East (Atlantica), and Great Lakes-Heartland.

But since cross-border regional relations now appear to be an indelibly key aspect of Canada-US linkages, involving all parts of Canada, it is still beneficial to recognize they are significant in each region and, consequently, it is important to discuss them in a regional context, whether or not present to a significant degree in all three dimensions.

Individual Regions

Each major region of Canada is discussed in this section highlighting the extent and specific nature of significant cross-border regional relations in their areas.

The West

By all accounts, it is in the West, which includes British Columbia, Alberta, Washington, Idaho, Oregon, Montana and, in some cases, Yukon, as well as Alaska, that cross-border regional relations seem the most profound and diversified. Based on these economic, socio-cultural, and organizational links, a cross-border region has taken shape.

The cross-border links in the West have a strong economic underpinning through major activities like agriculture, tourism, forestry, and the energy sector. The strong trade flows between the provinces and states confirm this economic interdependency. Although the economies of Washington State and of British Columbia are often in competition this has not prevented some co-operation even in that sector (Artibise, 1995).

In terms of culture and values, despite sub-area nuances, the western states and the western provinces seem to share a certain philosophy (Gibbins, 2002). They are somewhat more market oriented, have strong environmentalist movements, and feel somewhat removed from their respective national capitals (Alm and Taylor, 2003). Values research conducted among the general public in the West usually suggest that Alberta and to a lesser extent British Columbia, and the residents of the Pacific Northwest have more in common with each other than with other regions of their own countries. In particular, they share a broad range of values from neo-liberal priorities to moral permissiveness (Boucher, 2004a).

In terms of cross-border organizations, there is a dense network.[28] This is exemplified in Figure 13. The Pacific Northwest Economic Region (PNWER) is the largest and most sophisticated of the organizations, and acts as a forum and catalyst, with active representation from both provincial and state governments. However, a host of other bi-national organizations include the Western Governors Association, the Pacific Corridor Enterprise Council, and the Pacific Northwest Development Economic Council. On the environmental front, there is the *Northwest Environment Watch*. The International Mobility and Trade Corridor (IMAC) is one of a number of organizations working on transportation. The Discovery Institute is another-a private think-tank from Seattle that promotes the Cascadia Project to develop a balanced, seamless, and expanded transportation system between Washington, Oregon, and British Columbia.

The relatively high degree of co-operation within and among these regional cross-border organizations, local think-tanks, and universities also sets the West apart. Finally, the West has the emblematic and often-

Figure 13
Provinces and States Memberships in Various Western Organizations

	Western Governors [1]	PNWER	PACE	PNEDC	PS-BC Task Force	Cascadia Institute	Discovery Institute	IMTC	Northwest Environment
Alaska	*	*	*	*	*	*[2]			*[2]
A. Samoa	*								
Arizona	*								
California	*				*	*			*[2]
Colorado	*								
Guam	*								
Hawaii	*			*	*				
Idaho	*	*		*		*			*
Kansas	*								
Montana	*	*		*					*[2]
Nebraska	*								
Nevada	*								
New Mexico	*								
N. Dakota	*								
N. Maria. Is. I	*								
Oregon	*	*	*	*	*	*	*		*
S. Dakota	*								
Texas	*								
Utah	*								
Washington	*	*	*	*	*	*	*	*	*
Wyoming	*					*			
Alberta	*	*		*		*			
British Columbia	*	*	*	*	*	*	*	*	*
Manitoba	*								
Saskatchewan	*								
Yukon	?	*		*		*			
Northwest Territories				*					
Canadian Government								*	
US Government								*	

Notes:

PNWER: Pacific Northwest Economic Region
PACE: Pacific Corridor Enterprise Council
PNEDC: Pacific Northwest Economic Development Council
PS-BC: Task Force Pacific States-British Columbia Task Force
S & H: Schell and Hamer 1995
Artibise et al. 1997
IMTC: International Mobility Trade Corridor
Northwest Environment Northwest Environment Watch

1. Does not include the full state or province.

2. Includes only part of the state.

used reference to Cascadia. No where else in Canada are there such symbolic references, and in the words of an observer, "a state of mind" pointing to a regional identity (Henkel, 1993).

Prairies – Great Plains

Strong economic but relatively weak organizational links best characterize the Prairies-Great Plains. The region is relatively young, and emerging cross-border regional relations reflect important economic realities that transcend the border and result in certain economic commonalities.

As mentioned earlier, from an economic and cross-border organizational relationship point of view there are grounds to also include Alberta with Saskatchewan and Manitoba, and the northern Great Plains states of Montana, Wyoming, North Dakota, South Dakota, and Minnesota. This makes Alberta an active participant in two cross-border regions: the West and the Prairies-Great Plains. Together with the other Prairies Provinces, Alberta relies on a strong agricultural sector with large grain and cattle activities. It also shares a relatively low population density. As brought out during the fall-out of bovine spongiform encephalopathy (BSE) in Canada, prairie industries are often integrated across the border.

In the Prairies-Great Plains, cross-border organizational links are relatively weak. Alberta is the most deeply involved of the Prairie Provinces in cross-border organizational networks. Alberta has signed several agreements with US states, plus there is the Montana-Alberta Bilateral Advisory Council (MABAC). Saskatchewan also has an intergovernmental accord with Montana, and hosted the 2005 annual meeting of the Midwestern Legislative Conference. Manitoba recently participated in a joint economic mission with Great Plains states to Europe, highlighting that cross-border co-operation is taking place. However, there is no strong, regional organization of governments, although all three provinces are part of the large Western Governors Association.

An organization with a clear interest especially for the eastern part of the area is the Northern Great Plains Inc., a US-based think-tank (Fargo, North Dakota). This not-for-profit organization focuses on economic development, but it has not taken strong hold on the Canadian side of the border. The Great Plains Institute is an association of public and private members from Manitoba and cross-border states (based in Minneapolis) that concentrates on energy security and bio-based material. Ecological and economic interests also transcend the border (e.g., the problems facing Manitoba concerning North Dakota's recent approach to the management of Devils Lake) (Byers, 2005). The Red River Basin Commission involves Manitoba and Minnesota, North Dakota, and South Dakota. Manitoba and Minnesota have been closely associated in the management of cross-border water resources. A bio-science technology corridor exists between Manitoba and Minnesota.

Although both sides of the border have been mainly settled only within the last 100 years, they experienced different immigrant patterns involving various cultural groups. Nevertheless, geography and the economy resulted in some commonalities in outlook and manner that is, at least implicitly, reflected in a relatively more rural outlook and cultural expression and self-reliant way of life. Perhaps, as a consequence, this explains the fewer examples of cross-border organizations.

Great Lakes-Heartland

As a result of the importance of the Great Lakes area as a key gateway and commercial conduit between the two countries, the two federal governments and many national organizations attentive to Canada-US issues tend to focus on the Great Lakes-Heartland. While there are significant economic, socio-cultural, and organizational cross-border links, in this area, there is little sense of identity or dominant cross-border organizations.

The Great Lakes-Heartland has been an economic powerhouse, and centre of an industrial belt that is slowly shifting south and west within North

America. Nevertheless, Ontario, Michigan, Indiana, and Ohio still play a key North American role in manufacturing, namely in automotive and various other industrial, metal manufacturing and building equipment activities.

The private sector plays a leading role regarding cross-border organizational links. However, there is an absence of strong and dominant cross-border organizations. Rather, the Great Lakes-Heartland displays a large number of bi-national relationships that provide informal networks where organizations exchange information. For instance, the Council of Great Lakes Industries is a strong advocate of co-operation, which calls on governments to elaborate a vision for the region. On the environmental front, the Great Lakes Commission and a few private organizations provide instances of environmental co-operation. There is also the International Association of Great Lakes and St. Lawrence Mayors, the Great Lakes Cities Initiative, the Great Lakes Information Network, and Council of Great Lakes Governors, Council of Great Lakes Industries, and the Great Lakes Environmental Directory.

On the government front, Ontario has an MOU with Michigan that establishes general co-operation, and encourages further collaboration at the local levels. In addition, Ontario is a participant in the Council of Great Lakes Governors (of which Quebec is also a member). While governments and private sector leaders have concentrated their efforts on the management of the Great Lakes, they have not contributed much to the emergence of the Great Lakes-Heartland economic region. In terms of culture and values, there is little sense of regional identity (Boucher, 2004a). Although there is an appreciation that the cross-border area plays an instrumental role in the commercial links between the two countries, the notion of a cross-border regional identity/attachment is nascent at best. Nonetheless, there is considerable bi-national interest focused on the Great Lakes-Heartland cross-border region, and federal-provincial-state governmental co-operation does occur. Key ongoing concerns pertain to trade issues and border management between Ontario, New York, and Michigan.

The East

From the Atlantic coast to the Great Lakes, there is a large geographic region encompassing coastal habitats and the Appalachian range, and including Atlantic Canada plus Quebec, New England (Maine, New Hampshire, Vermont, Massachusetts, Connecticut, and Rhode Island) and New York. Within this region, two key sub-regions can be identified.

Atlantica

The East Coast links are not as plentiful and intense as those on the West Coast; however, Atlantic Canada and New England display a number of similarities – at least compared to the rest of the continent. The population is not growing as fast, socio-economic activities are alike on each side of the border, and small fishing communities, and primary industry (in particular, forest products, agriculture, and fishing clusters) still comprise relatively important parts of the economy.

The main multilateral organization in the East is the New England Governors and Eastern Canadian Premiers (NEG-ECP) Conference. Throughout the years, the Conference has been a useful forum for governors and premiers to exchange information. In recent years, more active private sector participation has developed. However, some regional actors have found that the NEG-ECP does not correspond appropriately to the needs of the eastern-most areas, and some organizations, such as the Atlantic Institute for Market Studies have been promoting the idea of Atlantica: the International Northeast Economic Region (AINER) that would include Atlantic Canada, northern New England (Maine, New Hampshire, Vermont), upstate New York, and part of southern and eastern Quebec.

In terms of its socio-cultural make-up, northern New England is composed of less conservative "blue states," which share a lot of values and beliefs with the Canadian provinces. In addition, because of previous similar immigration patterns from Europe, communities resemble each other on both sides of the border.[29]

Environmentally, the northeastern part of the continent is on the receiving end of acid rain. And crucially, organizations have been created to deal with some of these issues. The Gulf of Maine Council on the Marine Environment includes New Brunswick and Nova Scotia.

The Massachusetts Bay area is a key urban and economic centre that provides a focal point for economic activities north along the Atlantic coast.

Quebec-New England

Quebec also has strong economic ties to northern New England (Vermont, Maine, New Hampshire) but partakes in another dynamic that transcends those of Atlantic Canada. For instance, Quebec has important ties to New York, and supplies energy to various nearby states. The Conference of Governors and Eastern Canadian Premiers (NEG-ECP) was essentially initiated, because of the Governors' desire to entertain good relations with Quebec, at a time, in the 1970s, when an energy crisis loomed (Lubin, 1993). Since then, the Conference has devoted much of its activity to energy and the environment while progressively expanding into other economic areas. There are also cross-border regional interests that involve Quebec and the northern New England states and New York. For instance, environmental co-operation exists between Quebec and Vermont, and New York, to protect Lake Champlain. Quebec also has an MOU with nearby New York.

In terms of culture, Quebec is set apart from the rest of North America. A colourful history links Quebec to New England and New York, and there are several US border communities with strong ties to Quebec. However, there does not appear to be, on Quebec's part, a special affinity or attachment of values developing toward a specific cross-border region, despite strong economic/commercial links and several organizational relationships.

Indeed, Quebec is active in seeking relationships both with its neighbours and further afield. Some might identify this to a "status seeking" movement that has been relatively stronger in Quebec than elsewhere in Canada. While this may contribute to the interest that Quebec shows for its neighbours, it might also explain why the province would not want to concentrate too much of its attention on one specific region, nor on one specific organization.

Special Note: The North

It is important to note that there is one other important cross-border region. That is, of course, the North – Canada's northern territories plus Alaska. While Yukon and Alaska have been considered in the context of the West, it is also true that there is a strong similitude in the economic experiences, opportunities, and challenges facing the inhabitants of the continental north that contribute to a sense of northern identity. As well, the North is rich in the cultures of northern indigenous peoples, and has organizations that are specific to northern concerns and transcend northern boundaries. Unfortunately, much more work would need to be carried out to better understand the economic, socio-cultural, and organizational dimensions of this important cross-border region. At this time, the focus of the project must instead be on the cross-border regions for which we have research material. While some of the lessons learned from the study of these other cross-border regions will be relevant, it is unlikely they will be able to capture the total reality of the North.

Part 4: Potential Policy Implications

It is too early to draw definite conclusions on the opportunities and challenges for the Government of Canada, and too early to propose policy options. However, by reviewing preliminary findings of this report, it is possible to identify developments and areas within the regional dimension of the Canada-US dynamic that may have interesting implications on public policy.

Cross-Border Regions Are a Key Feature of North American Integration

North American linkages continue to grow, and there is an increasingly regional expression to the phenomenon, as seen in the growth in cross-border regional economic links. Cross-border regions are where North American integration is the most dynamic, and where the bridges of friendship, co-operation, and business are often first developed.

For instance, as globalization causes firms and cross-border activities to become more integrated, border provinces and states become more interdependent, and firms and communities become more specialized in cross-border supply chains. There are also a rising number of regional cross-border issues, particularly concerning immigration, infrastructure, and the environment. Considering that the present levels of cross-border co-operation are built on strong economic foundations, it is probably safe to assume that cross-border relations will continue to expand in importance.

At this point, it is difficult to say how far the process will go, but it is rather certain that, barring a major accident, what can be seen is only the beginning of a lasting dynamic. For instance, one might note that most of the cross-border organizations have little or no permanent staff yet, thus limiting what they can undertake. If this were to change, it would probably amount to a quantum leap, and the organizations would substantially diversify their activities.

In addition, the nature of cross-border co-operation appears to be changing. The 1930s and the years immediately following World War II, for example, saw a number of initiatives. But they were usually limited to a specific question, generally local environmental and infrastructure problems.

These types of initiatives still exist, but now there are also larger, more general forms of co-operation. Co-operation "on the border" is a growing concern, especially with regards to facilitating the movement of goods and people while tightening security. There are also many sensitive cross-border economic issues in such areas as energy, water, agriculture, and transportation. Business people and the various levels of government on both sides of the border, find it increasingly in their interests to engage in cross-border co-operative activities to improve their economic development.

Impact on Policies Aimed at Regional Development

The existence of North American linkages that are stronger within cross-border regions has an important impact in the context of policies aimed at regional development. As Canadian regions become more integrated with, and dependent on, the performance of specific US regions and economic sectors, policies targeted at regional development in Canada need to take this new reality into account. This may call for new policy-development frameworks that could involve different levels of government and more diversified stakeholders.

As well, cross-border co-operation could become the vehicle for regional members to work together on activities that generate economies of scope to save money, increase efficiency, and give the region the edge it needs to get ahead and stay ahead in the larger global economy. It is noteworthy that most countries in western Europe have already decentralized their regional development policies. Perhaps it is to time to consider this in a North American cross-border context.

More Effective Regional Issue Management

It may also prove more practical and easier to address local and regional issues and resolve disputes in the context of cross-border regions, because the

costs and the benefits are less diffuse, and more readily identifiable at a sub-national level. Hence, cross-border regions and their organizations may provide an effective channel to move forward on specific issues of a regional nature (i.e., public-good type issues such as environmental, resource management, border-related infrastructure) that may not meet the threshold required to trigger interest and action at the national level. An example is the environmental co-operation that exists among Quebec, Vermont, and New York to protect Lake Champlain.

Local Participation in the Management of Canada-US Issues

As a result of their smaller geographical footprint and their focus on regional and local issues, cross-border regional organizations constitute a promising vehicle for the increased participation of local stakeholders and regional players in the management of Canada-US issues. With its cross-border region-wide network of private and government officials, PNWER provides an example through its 17 different working groups and membership that includes premiers, governors, legislators, counties, economic development commissions, industry associations, and private sector members.

Cross-border organizations have shown the ability to bring a broader representational voice alongside elected officials on cross-border matters (e.g., in opposing proposed US visa and passport regulations).

To date, however, cross-border co-operation has remained mostly a dynamic involving politicians and larger companies, although a few initiatives could be signs that this too is changing. But the new cross-border co-operation is still a fairly recent movement; 15 years is not much for such a dynamic. Thus, the potential is greater than what has been witnessed so far.

Promoting Better Understanding

Regional cross-border organizations can be effective conduits to increase the amount and quality of information available to assess policy issues and provide guidance to policy makers at both the regional and national levels. The process would work both ways, as cross-border organizations can be used to gather information of a more regional nature and diffuse information from the central governments to regional stakeholders, for example, on the regional impacts of policy decisions.

It is often said that Americans do not know Canada very well, and it is probably just as true that Canadians could improve their knowledge of the United States. These organizations provide opportunities to narrow those gaps. For Canadians, because of the specificity of the US political system and of the role of the US senators and representatives, cross-border organizations also provide a channel to communicate Canadian concerns to Washington.

Better Balance of Strength

For Canada, participation in regional cross-border organizations can be advantageous, because the imbalance present at the national level is largely absent at the sub-national level. Hence, while Canada faces an imbalance of 10-to-1 in terms of population and gross domestic product in its bilateral interactions with the United States, the ratio is much smaller when the interactions take place at the sub-national level in the context of cross-border regions. This may lead to a "rapport de force" where the interest of each party is less diffused and much less tilted in favour of the large country.

Moreover, in the dynamic of regional cross-border co-operation, US states have often been the demanders. One could ask if Canada has taken the true measure of that situation. It may be an indication that Canada is in a more forceful position to negotiate. At the national level, in contrast, Canada is often the initiator and the situation is generally more asymmetrical there.

North America and Its Regions as Global Production Platforms

With competition taking place increasingly at the international level in a rising number of economic sectors (e.g., automotive, commodities, aircraft, pharmaceuticals, steel, plastics), North American producers face intense competition in global markets. As different North American regions, *cross-border or otherwise*, become specialized in specific economic activities and sectors, central and local governments may need to examine the possibility of establishing new economic policy frameworks and governance

institutions to capture this new reality. Such mechanisms would work to ensure the competitiveness of North American industries in global markets, in particular with the emergence of China as a leading international competitor in both domestic and third markets.

This may involve the creation of bi-national, multi-level economic organizations that will involve different levels of government and other stakeholders from industry and civil society in a quest for harmonized, reinforcing policy frameworks aimed at specific industries or clusters. Potential candidates for such approaches could include the Canadian-US steel, automotive, and agriculture industries.

Cross-Border Regions as Gateways for Value-Added Activities

Similarly, cross-border regions can be considered as launching points and laboratories for Canadian firms to introduce and test new products in the United States before subsequently tackling more distant markets within the United States and beyond. Proximity, networks through cross-border institutions and socio-cultural affinity provide a good rationale for firms to launch new and emerging products in neighbouring and nearby states. Hence, cross-border regions can play a key role in quickening the introduction of Canadian products in US markets, many involving higher value products and activities. As a result, cross-border regions are also important gateways for the promotion of innovative activities, which will be important to the future prosperity of Canada's regions.

Cross-Border Organizations as Incubators

There is also a large literature suggesting that there should be an important leap forward in terms of NAFTA or North American organizations to address pressing cross-border issues, such as dragging trade disputes, customs, immigration, and cross-border infrastructure. In this context, regional cross-border organizations, such as PNWER with its large representation and numerous working groups, can be used as examples or can have their mandate enlarged to improve the coverage and effectiveness of the current bi-national or North American organizations.

Pressure on Single-Door Diplomacy

The growing emergence of cross-border regions, that display a high level of involvement of sub-national governments in Canada-US issues, would have an important impact in the context of how foreign diplomacy is conducted. Traditionally, state-to-state relations were largely the domain of the president or the prime minister, ambassadors and foreign ministers. Cross-border co-operation and the multiplicity of sub-national actors and linkages raise new challenges of co-ordination for the Government of Canada. Similarly, the cross-border regions and their institutions become a channel of communication between sub-national and national governments that cannot be ignored.

Potential Erosion of Canadian Identity

To the extent that Canadians develop an increasing sense of belonging to a specific region – cross-border or otherwise – there is a risk of erosion to Canadian identity. This risk is compounded when Canadian regions and provincial governments increasingly rely on regional organizations to address some of the local or specific issues they face in their relations with their US counterparts, while relying less on the intervention of the Government of Canada.

Summary and Way Forward

Clearly, cross-border linkages comprise an important element of Canada-US integration, resulting in the rising importance of cross-border regions as essential units of analysis.

Notwithstanding growing globalization, considerable bi-national economic activity continues to occur along the border, among a few fairly distinct groupings of neighbouring and nearby provinces and states. These economic realities find themselves complemented by a level of integration and institutionalization on the cultural and organization fronts.

Although cross-border regional relations can take different forms depending on the province, clearly they are entrenched in the fabric of Canada-US relations at the provincial/state level. This raises the importance of cross-border relations for future growth and prosperity. It is therefore useful to focus on cross-border relations in a regional context, noting that links might not be equally strong in all dimensions, but they are nevertheless significant across all regions of Canada.

This may require new ways of thinking about policies and policy development that incorporate a regional lens and respond to the rising level of co-operative and co-ordinating links between Canadian and US parties in cross-border regions.

We invite your comments.

In the weeks ahead, further analytic work is planned to build on the economic indicators, review lessons from the European experience with cross-border regions, and more fully incorporate results from the Leader Survey on Canada-US Cross-Border Regions.

By mid-2006, we intend to produce a final report that includes findings from a regional roundtable series to take place in major Canadian regions during the fall/winter 2005.

Through this endeavour, we hope to substantiate the growing significance, scope, and nature of cross-border regional relationships, explore their possible future evolution, and outline their policy implications for the Government of Canada.

André Downs
Senior Project Director
a.downs@prs-srp.gc.ca
613 995.3655

Appendix 1: Growth in Provincial Exports

Averages	West (%)		Prairies/Plains (%)			Great Lakes (%)	East (%)				
							Quebec	Atlantic Canada			
	BC	AB	AB	SK	MB	ON	QC	NB	PE	NS	NL
Compound Average Annual Growth											
1980-1989: Pre-FTA											
With Cross-border States	5.8	-3.3	-0.7	-0.7	4	12.5	7	9.5	14.1	8.4	15.8
With Others	7.1	8.2	5.4	3.3	11.1	9.9	7.6	5.2	19.1	8.5	14.3
1989-1994: Early FTA											
With Cross-border States	12.7	5.4	2.1	17	21.2	14.6	12.7	4.8	7.4	5.1	-19.2
With Others	9.9	14.6	14.8	9.3	5.7	7.8	13.3	17.6	6.6	10.0	2.8
1994-2001: Early NAFTA											
With Cross-border States	9.7	16.1	12.8	5.7	9.5	5.4	7.5	13.4	16.1	20.9	19.1
With Others	8.2	15.8	16.3	10.0	14.5	10.4	9.7	13.0	22.7	5.6	14.0
2001-2004: Post 9-11											
With Cross-border States	-3.4	-0.6	16.4	17.2	-4	-1.2	-2.9	15.3	12.7	-5.7	13.3
With Others	-2.9	6.5	3.6	-2.8	-0.1	-0.3	-1.9	-10.1	-20.7	1.7	1.6

Notes:

The FTA was implemented in January 1, 1989 and the NAFTA was launched January 1, 1995.

The tragedy of September 11, 2001 impacted trade flows in that year (and had a dampening effect on subsequent years' trade flows).

Source: PRI calculations based on data from Statistics Canada (based on provincial and state data including Washington, DC but excluding Alaska).

APPENDIX 2

A – Scope and Nature of Cross-Border Links: Economic Details

The Economy

Significant or relatively strong:
● Trade level ◎ Trade breadth
◉ Trade growth ○ Trade dependency

	West		Prairies/Great Plains			Great Lakes-Heartland	East				
							Quebec		Atlantic Canada		
	BC	AB	AB	SK	MB	ON	QC	NB	NS	PE	NL
Alabama	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●○○	○○○○	○○○○
Alaska	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●○○	○○○○	○○○○	○○○○
Arizona	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Arkansas	○○○○	○○○○	○○○○	○●○○	○○○○	○○○○	○○○○	●●○○	○○○○	○○○○	○○○○
California	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Colorado	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	○○○○	○○○○
Connecticut	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●○○○	●●○○	○○○○	●●○○	●●○○
Delaware	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	○●○○
Dist of Columbia	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Florida	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○
Georgia	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Hawaii	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Idaho	●○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	○○○○
Illinois	○○○○	●●○○	●●○○	●○○○	●○○○	●○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Indiana	○●○○	○○○○	○○○○	●○○○	●●○○	●●○○	○●○○	○○○○	○○○○	○○○○	○○○○
Iowa	○○○○	●●○○	●●○○	●●○○	●●○○	○●○○	○○○○	○○○○	○○○○	○○○○	○○○○
Kansas	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Kentucky	○○○○	○○○○	○○○○	○○○○	○●○○	●●○○	●●○○	○●○○	○○○○	○○○○	○○○○
Louisiana	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○
Maine	○○○○	○○○○	○○○○	○○○○	○●○○	○○○○	●●○○	●●○○	●○○○	●●○○	●●○○
Maryland	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●○○	●○○○
Massachusetts	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●○○○	●○○○	●●○○	●●○○
Michigan	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	○●○○	○○○○	●●○○	○○○○	○○○○
Minnesota	○○○○	●●○○	●●○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Mississippi	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Missouri	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○
Montana	●○○○	●●○○	●●○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Nebraska	○○○○	○○○○	○○○○	○○○○	●○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Nevada	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●○○	○○○○	○○○○
New Hampshire	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	●●○○	●●○○	●●○○	●●○○
New Jersey	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	●●○○
New Mexico	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
New York	○○○○	●●○○	●●○○	○○○○	○○○○	○○○○	●○○○	○○○○	○○○○	●●○○	○○○○
North Carolina	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
North Dakota	●●○○	●●○○	●●○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Ohio	○○○○	○●○○	○●○○	○○○○	○○○○	●●○○	●●○○	○○○○	○●○○	○○○○	○○○○
Oklahoma	○○○○	○○○○	○○○○	●●○○	○○○○	○○○○	○○○○	○○○○	●●○○	○○○○	○○○○
Oregon	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●○○	○○○○	○○○○	○○○○
Pennsylvania	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	●○○○	○○○○	○○○○
Rhode Island	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	●○○○	●○○○	●●○○	●●○○
South Carolina	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	○○○○	●○○○	●●○○	○○○○	○○○○
South Dakota	○●○○	○○○○	○○○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Tennessee	○○○○	●●○○	●●○○	○○○○	○○○○	●●○○	○●○○	●○○○	○●○○	○○○○	○○○○
Texas	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●○○	○○○○	○○○○	●●○○
Utah	●●○○	○○○○	○○○○	○●○○	○○○○	○○○○	●○○○	○○○○	○○○○	○○○○	○○○○
Vermont	○●○○	●○○○	●○○○	○○○○	○○○○	○○○○	●●○○	●●○○	○○○○	●○○○	○○○○
Virginia	●○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Washington	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
West Virginia	○○○○	●●○○	●●○○	○○○○	○○○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○
Wisconsin	○○○○	○○○○	○○○○	●●○○	●●○○	●●○○	○○○○	○○○○	●●○○	○○○○	○○○○
Wyoming	○○○○	●●○○	●●○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○

Note: Based on Top 10 in province-state ranks, for each economic measure.

APPENDIX 2

A – Scope and Nature of Cross-Border Links: Economic Details

The Economy

Significant or relatively strong:
● Trade level ◐ Trade breadth
● Trade growth ○ Trade dependency

	West		Prairies/Great Plains			Great Lakes-Heartland	East				
							Quebec	Atlantic Canada			
	BC	AB	AB	SK	MB	ON	QC	NB	NS	PE	NL
Alabama	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	◐●○○	○○○○	○○○○
Alaska	●●●○	○○●○	○○●○	○○●○	○○●○	○○●○	○○●○	○●○○	○○○○	○○○○	○○●○
Arizona	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Arkansas	○○○○	○○○○	○○○○	○●○○	○○○○	○○○○	○○○○	●●○○	○○○○	○○○○	○○○○
California	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Colorado	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	○○○○	○○○○
Connecticut	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●○○○	●●○○	○○○○	●●●○	●●○○
Delaware	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○●○	○○○○	●●○○	○●●○
Dist of Columbia	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Florida	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○
Georgia	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Hawaii	○○●○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Idaho	●○●○	○○●○	○○●○	○○○○	○○●○	○○●○	○○●○	○○○○	○○●○	●●●○	○○●○
Illinois	○○○○	●●○○	●●○○	●○●○	●○○○	●○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Indiana	○●○○	○○○○	○○○○	●○○○	●●○○	●●○○	○●○○	○○○○	○○○○	○○○○	○○○○
Iowa	○○○○	●●○○	●●○○	●●○○	●●○○	○●○○	○○○○	○○○○	○○○○	○○○○	○○○○
Kansas	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Kentucky	○○○○	○○○○	○○○○	○○○○	○●○○	●●○○	●●○○	○●○○	○○○○	○○○○	○○○○
Louisiana	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●●○
Maine	○○●○	○○●○	○○●○	○○○○	○●●○	○○●○	●●●○	●●●○	●○○○	●●●○	●●●○
Maryland	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●●○	●○○○
Massachusetts	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●○○○	●○○○	●●●○	●●○○
Michigan	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	○●○○	○○○○	●●○○	○○○○	○○○○
Minnesota	○○○○	●●○○	●●○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Mississippi	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○●○	○○○○	○○○○	○○○○
Missouri	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○
Montana	●○●○	●●●○	●●●○	●●●○	●●●○	○○●○	○○●○	○○●○	○○○○	○○○○	○○●○
Nebraska	○○○○	○○○○	○○○○	○○●○	●○●○	○○○○	○○○○	○○●○	○○●○	○○○○	○○○○
Nevada	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●○○	○○○○	○○○○
New Hampshire	○○○○	○○●○	○○●○	○○●○	○○●○	○○●○	●●●○	●●●○	●●●○	●●●○	●●●○
New Jersey	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	●●○○
New Mexico	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
New York	○○○○	●●○○	●●○○	○○○○	○○○○	○○○○	●○○○	○○○○	○○○○	●●○○	○○○○
North Carolina	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
North Dakota	●●●○	●●●○	●●●○	●●●○	●●●○	○○●○	○○●○	○○●○	○○●○	○○●○	○○○○
Ohio	○○○○	○●○○	○●○○	○○○○	○○○○	●●○○	●●○○	○○○○	○●○○	○○○○	○○○○
Oklahoma	○○○○	○○○○	○○○○	●●○○	○○○○	○○○○	○○○○	○○○○	●●○○	○○○○	○○○○
Oregon	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●○○	○○○○	○○○○	○○○○
Pennsylvania	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	●○○○	○○○○	○○○○
Rhode Island	○○●○	○○○○	○○○○	○○○○	○○○○	○○●○	●●●○	●○●○	●○●○	●●●○	●●●○
South Carolina	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	○○○○	●○○○	●●○○	○○○○	○○○○
South Dakota	○●●○	○○●○	○○●○	●●●○	●●●○	○○●○	○○●○	○○●○	○○○○	○○○○	○○○○
Tennessee	○○○○	●●○○	●●○○	○○○○	○○○○	●●○○	○●○○	●○○○	○●○○	○○○○	○○○○
Texas	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●○○	○○○○	○○○○	●●○○
Utah	●●○○	○○●○	○○●○	○●●○	○○○○	○○○○	●○○○	○○○○	○○○○	○○○○	○○○○
Vermont	○●●○	●○●○	●○●○	○○●○	○○●○	○○●○	●●●○	●●●○	○○●○	●○●○	○○●○
Virginia	●○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Washington	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○●○
West Virginia	○○○○	●●○○	●●○○	○○○○	○○○○	●●○○	●●○○	○○○○	○○●○	○○●○	○○○○
Wisconsin	○○○○	○○○○	○○○○	●●○○	●●○○	●●○○	○○○○	○○○○	●●○○	○○○○	○○○○
Wyoming	○○●○	●●○○	●●○○	●●●○	●●●○	○○●○	○○●○	○○○○	○○●○	○○○○	○○○○

Note: Based on Top 10 in province-state ranks, for each economic measure.

B – Scope and Nature of Cross-Border Links: Socio-Cultural Value Gaps Details

CROSS-BORDER SOCIO-CULTURAL VALUE GAPS

Average Gaps in Percentage Points Based on All 7 Broad Value Dimensions

	British Columbia	Alberta	Saskatchewan-Manitoba	Great Lakes-Hearland	East	
					Quebec	Atlantic Canada
	BC	AB	SK, MB	ON	QC	NB, PE, NS, NL
Northeast	8.0	7.5	6.0	5.5	8.0	4.0
Midwest	8.5	7.0	7.0	5.5	9.5	4.5
Southern	13.0	9.6	7.6	9.3	12.0	6.7
Western	6.3	4.6	7.3	5.3	7.6	6.3

SMALLEST CROSS-BORDER SOCIO-CULTURAL VALUE GAPS

Average Gaps in Percentage Points By 7 Broad Value Dimensions

	British Columbia	Alberta	Saskatchewan-Manitoba	Great Lakes-Hearland	East	
					Quebec	Atlantic Canada
	BC	AB	SK, MB	ON	QC	NB, PE, NS, NL
Support for Free Market	-1.9 Western	-3.8 Western	0.2 Southern	-1.0 Western	8.8 Northeast	8.9 Southern
Protest Behaviour	-2.9 Western	-1.3 Western	3.4 Southern	-0.3 Southern	-2.1 Western	-1.2 Southern
Neo-liberal Prioirites	7.9 Western	3.1 Western	7.4 Western	2.4 Western	11.2 Western	-1.2 Northeast
Environmental Ethics	-3.2 Northeast	0.2 Southern	3.7 Southern	-0.9 Mid-west	1.1 Western	0.2 Northeast
Situational Intolerance (Racial)	4.1 Western	1.2 Western	2.9 Western	2.9 Northeast Western	-1.3 Western	0.3 Western
Civil Permissiveness	-2.9 Southern	-0.3 Western Mid-west Northeast	1.2 Southern	1.2 Southern	-1.9 Southern	0.2 Northeast Western Southern
Moral Permissiveness	-11.3 Western	-7.4 Western	0.0 Northeast	-2.1 Western	-12.1 Western	-0.4 Northeast

Notes: Regarding the socio-culture value index:
The index is actually based on 32 value items that comprise the seven broad dimensions. Data from 1990 and 2000 were combined for statistical significance.
Consequently, it can not be tested whether cross-border regional value gaps are more or less pronounced in 2000 than in 1990.
For each dimension, a scale was constructed to measure the extent of value similarities and differences between regional pairs.
More similar regions would have a value gap that is small (in absolute sense). These individual seven scales all had a Cochran Alpha Test above 0.75.

Northwest includes Washington and Oregon.
California includes California.
Rocky Mountain includes Idaho, Montana, Wyoming, Nevada, Utah, Arizona, and New Mexico.
West South Central includes Texas, Oklahomoa, Arkansas, and Louisiana.
East South Central includes Mississippi, Alabama, Tennessee, Kentucky, West Virginia, and southern Ohio.
East North Central includes Wisconsin, Michigan, Illinois, Indiana, and northern Ohio.
West North Central includes North Dakota, South Dakota, Minnesota, Nebraska, Iowa, Kansas, and Missouri.
South Atlantic includes Florida, Georgia, South Carolina, North Carolina, Virginia, Maryland, and Delaware.
Mid-Atlantic includes Pennsylvania, New York, and New Jersey.
New England includes Maine, New Hampshire, Vermont, Massachusetts, Connecticut, and Rhode Island.

Northeast includes New England and Mid-Atlantic.
Southern includes South Atlantic, East South Central, and West South Central.
Mid-west includes East North Central, and West North Central.
Western includes Rocky Mountain, Northwest, and California.

C – Scope and Nature of Cross-Border Links: Organizational Relations Details

Organizational Relations

Significant or relatively strong presence in:
● Single-purpose intergovernmental
● Multi-purpose intergovernmental
● Civil organizations
○ Cities

	West		Prairies/Great Plains			Great Lakes-Heartland	East				
							Quebec		Atlantic Canada		
	BC	AB	AB	SK	MB	ON	QC	NB	NS	PE	NL
Alabama	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Alaska	●●●○	●●●○	●●●○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Arizona	●●○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Arkansas	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
California	●●●○	●●●○	●●●○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Colorado	●●○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Connecticut	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●○○	○●○○	○●○○	○●○○	○●○○
Delaware	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Dist of Columbia	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Florida	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Georgia	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Hawaii	●●○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Idaho	●●●○	●●●○	●●●○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Illinois	○○○○	○○○○	○○○○	○○○○	○○○○	●○○○	●○○○	○○○○	○○○○	○○○○	○○○○
Indiana	○○○○	○○○○	○○○○	○○○○	○○○○	●○○○	●○○○	○○○○	○○○○	○○○○	○○○○
Iowa	○○○○	○○○○	○○○○	○○●○	○○●○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Kansas	○●○○	○●○○	○●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Kentucky	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Louisiana	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Maine	○○○○	○○○○	○○○○	○○○○	○○○○	●○○○	●●○○	●●○○	●●○○	○●○○	○●○○
Maryland	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Massachusetts	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●○○	●●○○	●●○○	○●○○	○●○○
Michigan	○○○○	○○○○	○○○○	○○○○	○○○○	●○●○	●○○○	●○○○	●○○○	○○○○	○○○○
Minnesota	○○○○	○○○○	○○○○	○○●○	●●●○	●○●○	●○○○	○○○○	○○○○	○○○○	○○○○
Mississippi	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Missouri	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Montana	●●●○	●●●○	●●●○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Nebraska	○●○○	○●○○	○●○○	○●○○	○○●○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Nevada	●●○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
New Hampshire	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○●○○	●●○○	●●○○	○●●○	○●○○
New Jersey	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
New Mexico	●●○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
New York	○○○○	○○○○	○○○○	○○○○	○○○○	●○●○	●○○○	●○○○	●○○○	○○○○	○○○○
North Carolina	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
North Dakota	○●○○	●●○○	●●○○	○○●○	●○●○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Ohio	○○○○	○○○○	○○○○	○○○○	○○○○	●○○○	●○○○	○○○○	○○○○	○○○○	○○○○
Oklahoma	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Oregon	●●●○	●●●○	●●●○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Pennsylvania	○○○○	○○○○	○○○○	○○○○	○○○○	●○○○	●○○○	○○○○	○○○○	○○○○	○○○○
Rhode Island	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●○○	○●○○	●●○○	○●○○	○●○○
South Carolina	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
South Dakota	○●○○	○●○○	○●○○	○○●○	●○●○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Tennessee	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Texas	○●○○	○●○○	○●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Utah	●●○○	●●○○	●●○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Vermont	○○○○	○○○○	○○○○	○○○○	○○○○	●○○○	●●○○	●●○○	●●○○	○●○○	○●○○
Virginia	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Washington	●●●○	●●●○	●●●○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
West Virginia	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○
Wisconsin	○○○○	○○○○	○○○○	○○○○	○○●○	●○●○	●○○○	○○○○	○○○○	○○○○	○○○○
Wyoming	●●●○	●●●○	●●●○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○

This Figure is based on major organizations, including the following. Some are umbrella organizations (and important affiliated organizations may also be included).

British Columbia

Single-purpose intergovernmental: B.C.-Washington Environmental Cooperation Council, Other Task Forces (Abbotsford-Sumas Aquifer, Nooksack River Flooding, Lower Fraser Valley/Pacific Northwest Airshed, Georgia Strait, Puget Sound), Pacific States-B.C. Oil Spill Task Force, Okanagon River Basin, Western Interstate Energy Board (energy arm of Western Governors' Association), Western Association of State Highway and Transportation Officials, Western Legislative Forestry Task Force

Multi-purpose intergovernmental: Western Governors' Association, Pacific Northwest Economic Development Council

Civil organizations (can include significant governmental): Pacific Northwest Economic Region, Pacific Corridor Enterprise Council, Cascadia Institute, Discovery Institute, International Mobility Trade Corridor, Northwest Environment, People for Puget Sound, Kettle Range Conservation Group

Cities: Cascadia Mayors Council, Vancouver-Seattle (security)

Alberta

Single-purpose intergovernmental: Coutts/Sweet Grass, Western Interstate Energy Board (energy arm of Western Governors' Association), Western Association of State Highway and Transportation Officials, Western Legislative Forestry Task Force, Alberta-Montana Government Exchanges

Multi-purpose intergovernmental: Western Governors' Association, Pacific Northwest Economic Development Council, Specific State Relations (Montana-Alberta Bilateral MOU and Advisory Council, and MOUs with Alaska, Arizona, California, Idaho, Oregon, Texas and Washington)

Civil organizations (can include significant governmental): Pacific Northwest Economic Region, Pacific Corridor Enterprise Council, Cascadia Institute, Discovery Institute, International Mobility Trade Corridor, Northwest Environment

Cities: Lethbridge and Grand Falls (Montana)

Saskatchewan

Single-purpose intergovernmental: International Souris River Board

Multi-purpose intergovernmental: Western Governors' Association, Accord with Montana

Civil organizations (can include significant governmental): Northern Great Plains Inc.

Manitoba

Single-purpose intergovernmental: Red River Basin Commission, International Souris River Board

Multi-purpose intergovernmental: Western Governors' Association, Partnership Agreement with Minnesota (Bioscience Technology Corridor)

Civil organizations (can include significant governmental): Northern Great Plains Inc., Great Plains Institute

Ontario

Single-purpose intergovernmental: Great Lakes Commission, Great Lakes Environmental Directory and Great Lakes Aquatic Habitat Network and Fund

Multi-purpose intergovernmental: Council of Great Lakes Governors, MOUs with New York and Michigan

Civil organizations (can include significant governmental): Council of Great Lakes Industries

Cities: International Association of Great Lakes and St. Lawrence Mayors, Great Lakes Cities Initiative, Toronto and Indianapolis, Toronto and Chicago, Niagra and Buffalo

Quebec

Single-purpose intergovernmental: Great Lakes Commission, environmental cooperation with Vermont and New York regarding Lake Champlain, Champlain/Lacolle Port of Excellence

Multi-purpose intergovernmental: Conference of New England Governors and Eastern Canadian Premiers, Council of Great Lakes Governors, MOU with New York

Civil organizations (can include significant governmental):

Cities: Quebec City and Albany (New York)

New Brunswick

Single-purpose intergovernmental: Gulf of Maine Council on the Marine Environment, St. Croix International Waterway Commission, Calais/St. Stephen

Multi-purpose intergovernmental: Conference of New England Governors and Eastern Canadian Premiers, MOU with Maine

Cities: Edmunston and Madawaska (Maine)

Nova Scotia

Single-purpose intergovernmental: Gulf of Maine Council on the Marine Environment

Multi-purpose intergovernmental: Conference of New England Governors and Eastern Canadian Premiers, Atlantica: the Internatinal Northeast Economic Region

Prince Edward Island

Multi-purpose intergovernmental: Conference of New England Governors and Eastern Canadian Premiers

Newfoundland and Labrador

Multi-purpose intergovernmental: Conference of New England Governors and Eastern Canadian Premiers

Appendix 3: Select List of Organization Web Sites

All web sites were accessed on October 26, 2005.

Atlantic Salmon Federation
<www.asf.ca>

Atlantica International Northeast Economic Region
<www.atlantica.org>

Atlantic Institute for Market Studies
<www.aims.ca>

Atlantic Provinces Chambers of Commerce
<www.apcc.ca>

British Columbia/Washington Environmental Cooperation Council (ECC)
<www.env.gov.bc.ca/spd/ecc/index.html>

Buffalo Niagara Partnership
<www.thepartnership.org>

Cascadia Institute
<www.columbiana.org/cascadia_institute.htm>

Cascadia Mayors Council
<www.cityofseattle.net/cascadiamayors/>

Cascadia Project
<www.discovery.org/cascadia/about.php>

Council of Great Lakes Governors
<www.cglg.org>

Council of Great Lakes Industries
<www.cgli.org>

Council of State Governments
<www.csg.org/csg/default>

- CSG/Eastern Regional Conference
  <www.csgeast.org>
- CSG-Midwest
  <www.csgmidwest.org>
- CSG-West
  <www.csgwest.org>

Conference of New England Governors and Eastern Canadian Premiers
<www.newenglandgovernors.org/premiers.html>

Gouvernement du Québec
<www.gouv.qc.ca/wps/portal?lang=en>

Government of Alberta
<www.gov.ab.ca/home/index.cfm>

Government of British Columbia
<www.gov.bc.ca/bvprd/bc/home.do>

Government of Manitoba
<www.gov.mb.ca/splash.html>

Government of New Brunswick
<www.gnb.ca>

Government of Newfoundland and Labrador
<www.gov.nf.ca>

Government of Nova Scotia
<www.gov.ns.ca>

Government of Ontario
<www.gov.on.ca>

Government of Prince Edward Island
<www.gov.pe.ca>

Government of Saskatchewan
<www.gov.sk.ca>

Government of Yukon
<www.gov.yk.ca>

Great Lakes Cities Initiative
<www.nemw.org/glci/>

Great Lakes Commission
<www.glc.org>

Great Lakes Environmental Directory
<www.greatlakesdirectory.org>

Great Lakes Fishery Commission
<www.glfc.org>

Great Lakes Information Network
<www.great-lakes.net>

Great Plains Institute
<www.gpisd.net>

Gulf of Maine Council on the Marine Environment
<www.gulfofmaine.org>

International Association of Great Lakes and St Lawrence Mayors
<www.glc.org/mayors>

International Northeast Biosciences Corridor
<www.nebiocorridor.org>

International Mobility and Trade Corridor Project
<www.wcog.org/DesktopDefault.aspx?tabid=22>

Kettle Range Conservation Group
<www.kettlerange.org>

National Conference of State Legislatures
<www.ncsl.org>

New England Canada Business Council, Inc.
<www.necbc.org>

Northern Great Plains Inc
<www.ngplains.org>

Northwest Environment Watch
<www.northwestwatch.org>

Pacific Corridor Enterprise Council
<www.pacebordertrade.org>

Pacific Northwest Economic Development Council
<www.pnedc.org>

Pacific NorthWest Economic Region
<www.pnwer.org>

People for Puget Sound
<www.pugetsound.org>

Red River Basin Commission
<www.redriverbasincommission.org>

Vermont Health Care for All
<www.vthca.org>

Western Governors' Association
<www.westgov.org>

NOTES

1 At this stage, the research does not seek to identify cross-border regions involving geographic areas smaller than provinces and states, due to limitations imposed by the data and the need to implement a comprehensive approach within a prescribed time frame. More local cross-border regions surely exist, but they remain outside the present scope of the research.

2 While political links are important, they are not part of the analysis in this project.

3 Related analytical evidence is found in Proulx (2005a,b) who reviews literature and analysis on regional trade flows and development patterns, clusters, and metropolitan areas. Further analytical evidence is also available in Gu and Sawchuk (2001), who provide a gravity model analysis of state-province trade flows, and Sawchuk and Yerger (2004), who examine linkages between US growth and Canadian provincial exports to the United States, taking into account individual states important to individual provinces as export destination within the United States. Gu and Sawchuk (2004) measured Canada's regional integration in manufacturing industries with the United States, and showed that Canada and each of its regions, especially Ontario, are becoming more integrated in trade in manufactures with the United States. In respect to the nature and extent of Canada's regional integration with the United States, Poitras and Sawchuk (2004) considered the current economic situation of Canada's regions including economic disparities.

4 Further analysis on the economic dimension is being carried out to explore border effects between provinces and nearby states.

5 Canadian-owned establishments were most strongly present in states in the northeast, northern West Coast and some states in the southwest, plus key states in the Great Lakes-Heartland (Michigan, Illinois, and Ohio).

6 These select indicators on the economic dimension capture important and diverse facets of trade links that can exist between individual pairs of provinces and states. Trade links can sometimes reflect quite unique circumstances, and while no single measure may be able to take stock of all aspects, these select indicators, as a whole, may be useful to gauge the general strength of province-state economic relations. The first three variables are adjusted to consider the size of individual states. The fourth indicator that measures bilateral trade intensity, by the nature of its construction, neutralizes the impact of state size.

7 Bilateral trade intensity is used to measure the level of integration of one geographic unit with another. There are different variations, and the following is tailored to look at provincial trade with US states. It is an average of bilateral export and import intensities for the two units. For instance, looking at the specific example of Ontario and Michigan:

- Ontario's bilateral export intensity with Michigan is equal to the "ratio of these two ratios":
  (Ontario's exports to Michigan) / (Ontario's exports to United States)
  Divided by
  (Michigan's imports from Canada / (total US imports from Canada).

  This shows the relative importance of Ontario in supplying imports to Michigan in comparison with other supplying provinces. It also shows the relative importance of Michigan in absorbing exports provided by Ontario in comparison with other states. (In other words, it gauges Ontario's penetration of Michigan's market within the context of overall Canada-US trade.)

- Similarly, Ontario's bilateral import intensity with Michigan is equal to the "ratio of two ratios":

(Ontario's imports from Michigan) / (Ontario's imports from the United States)
Divided by
(Ontario's imports from the US) / (total Canada's imports from the United States)

This shows the relative importance of Michigan in supplying imports to Ontario in comparison with other supplying states. It also shows the relative importance of Ontario in absorbing exports provided by Michigan in comparison with other provinces.

- An average is then taken for the overall bilateral trade intensity between Ontario and Michigan.

8 Canadian exports to the United States exhibit what some refer to as the northern state bias whereby some exports identified as having a northern state destination are actually destined further south. A similar phenomenon occurs for imports. For instance, some imports from the United States entering through Ontario might be credited to Ontario even though the final destination could be elsewhere in the country. This reporting problem has more relevance for levels of trade than growth rates, and although it is not likely to be sufficiently large to deny the relatively stronger trade links between Canada and northern US states, the significance of the problem has been an ongoing topic for research.

9 For instance, border provinces and states often share similar resource and agricultural activities. The nature of agriculture of provinces and states in the Prairies-Great Plains includes grain and livestock pursuits, while coastal provinces and states are involved in fisheries.

10 The methodology used here borrows from Chen and Curtis (2004).

11 This is due, in part, to Montana and Wyoming becoming more similar in the movement of their economic activities with other states. In the pre-FTA period, Montana and Wyoming (Louisiana was the other state) exhibited negative correlations in their economic activities with those of every province.

12 Newfoundland and Labrador and Nova Scotia also had more similar correlations in economic activity with neighbouring states before the FTA. However, in the post-FTA period, their economic activity remained relatively more related with those of their cross-border partners. This was not the case for Ontario.

13 Exceptions include Alberta (in respect to the Prairies/Great Plains cross-border trade), and Nova Scotia and Newfoundland and Labrador, indicating relatively more specialization in their trade with their cross-border regional partners.

14 This is based on North American location quotients (NALQ), which measure the relative level of employment in a region compared to the North American average, and industry groups involving tradeables (41 in number), using comparable data drawn from Harvard University's Institute for Strategy and Competitiveness (Cluster Mapping Project) and the Institute for Competitiveness and Prosperity (Toronto).

The NALQ is an important indicator of regional specialization. It is calculated for industries in each province and state, and is the ratio of the province or state's industry share of employment relative to its North American share of employment.

15 In all these instances, there were relatively high NALQs, in excess of 3. If the NALQ is greater than 1, this means the province or state's industry produces more than the North American average, which generally indicates the province or state serves a market beyond the immediate region and has a relative abundance of the activity. A figure in excess of 3 indicates the province or state's industry produces far above the North American average.

16 The only exception in the period following the FTA was for Newfoundland and Labrador (1989-1994). Figure 4 showed that, after accounting for state size, provincial exports were more intense with neighbouring and nearby states. While cross-border regional exports grew faster than other

Canada-US exports, in absolute terms, cross-border exports from the West and Prairies also eclipsed Canada-US exports outside cross-border regions even in terms of percentage growth rate. Growth rates for British Columbia, the provinces of Saskatchewan and Manitoba, and Ontario were relatively higher in the period immediately after the FTA, while it was higher for the Atlantic Provinces after NAFTA.

17 That is, industries in which the proportion of highly educated workers (i.e., those with post-secondary education) is greater.

18 For sample size reasons, it was mandatory that the regional analysis be conducted at the macro-region level. The Canadian regions are based on the traditional Statistics Canada definition, except the Prairies is divided into Alberta and Saskatchewan-Manitoba. Similarly, the US regions are based on the US Census Bureau's definition, except the Pacific is divided into the Northwest (Oregon and Washington) and California. Alaska and Hawaii are omitted from the analysis. It is interesting to note that the US regions are, for the most part, separated between the north and the south. This allows us to capture some important regional socio-cultural differences. Only Rocky Mountains is in both.

19 The question of whether Canadian values and US values are converging is a frequent topic of discussion in broader studies comparing Canada with the United States. On one hand, the thesis of inevitability suggests that Canadian values are converging toward US values as economic integration takes place (Inglehart et al., 1996; Simpson, 2000; Pastor, 2001). On the other hand, the thesis of unpredictability or the myth of converging values (Lipset, 1990; Adams, 1997, 2003a,b) suggests that further economic integration with the United States would not jeopardize Canadian values that have for generations successfully survived the forces of Americanization. Beyond these extreme positions, is a third that argues that neither the convergence nor divergence thesis is completely accurate. Canada-US value comparisons more or less reflect "gratuitous attention to small differences" (Boucher, 2005).

20 The PRI analysis shows the separate results for seven key dimensions in the socio-cultural index presented in Figure 10. These results are presented in Appendix 2, and underscore just how relatively small the differences are between Canadian and US regions (especially when "moral permissiveness" is excluded). It is also interesting to note the greater dispersion in value gaps in the non-coastal areas (e.g., Quebec, Ontario, and Saskatchewan-Manitoba).

21 The URLs of institutions are provided at the end of this document.

22 To some degree, on the social side, there is a similar type of ideology across the border; witness the discussions on health care in Vermont. See, for instance, Vermont Health Care for All.

23 Many organizational linkages between Canadian and US cities occur beyond the cross-border region. For example, Halifax signed MOUs with Washington (1998) and Houston (2003), and Ottawa with Orlando (2004). In addition, the Federation of Canadian Municipalities formed a Canada-US committee with the National Leagues of Cities. The boards of trade of Montréal and Vancouver developed their own Canada-US committees to deal mainly with municipal issues.

24 This category includes organizations that adopted a specific objective like preserving a particular species and the organizations that are campaigning to protect the environment, provided in both cases, that the organization's interest is limited geographically. This excludes the national and international NGOs, even though many are very active locally.

25 Besides the Council, there are a few smaller organizations in the Great Lakes area, such as the Buffalo Niagara Partnership, Bordernet, and the World Trade Center (Detroit/Windsor).

26 Industry is becoming increasingly vocal through cross-border organizations in asking different levels of government to be more active in cross-border regional issues.

27 Please see Abgrall (2004b).

28 The West is seen from eastern Canada as a leader in cross-border organizations. For further information, see the Atlantica web site <www.atlantica.org>.

29 The culture in the East may also influence the organizations in another way. It is widely admitted that the eastern part of Canada, including Quebec, plays a relatively large receiving role for government philanthropy. Coincidentally, the involvement of the private sector – business or think-tanks – is relatively recent in the cross-country dynamic.

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